Whispering Hope

Soft as the voice of an angel
Breathing a lesson unheard,
Hope with a gentle persuasion
Whispers her comforting word.

If in the dusk of the twilight

Dim be the region afar,

Will not the deepening darkness

Brighten the glimmering star?

Whispering Hope,

Oh how welcome thy voice,

Making my heart

In its sorrow, rejoice.

Then when the night is upon us,
Why should the heart sink away?
When the dark midnight is over,
Watch for the breaking of day.

Wait till the darkness is over,

Wait till the tempest is done,

Hope for the sunshine tomorrow

After the shower is gone.

Verse from the song, 'Whispering Hope'.

FOREWORD

'Whispering Hope' is the product of undiluted good-will, perfect empathy and disarming honesty.

Having witnessed the physical and emotional travails that every woman endures following a diagnosis of Breast Cancer, I find it most heartening that someone who has 'been there' decided to share herself so profoundly.

The entire team at Passages is a perfect example of good human beings coming together for a great cause. With perfect commitment and devotion, they have worked with, learnt from, supported and helped innumerable patients. The fundamental purpose of 'Whispering Hope' has been empowerment, at all levels: emotions, awareness, knowledge, responsibility and participation in treatment decisions. Dispelling myths and propagating facts in a friendly and trustworthy way, it becomes a veritable 'friend' for a patient in need. This edition incorporates new knowledge about the condition in a way that is easy to understand by the majority.

My heart-felt good wishes go out to all patients, who must strive to attain best results always, and to their family and friends who stand by them at all times.

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About the creators of this book

Dr. Tarana Khubchandani is a qualified Oral Surgeon and a Gallerist with an inherent and abiding sense of aesthetic beauty and value. Inspired by her personal experience and in keeping with the aims and objectives of PASSAGES, she has written this valuable book. Tarana believes her life was enriched by the quality and generosity of love she received. Her caring nature and positive attitude helped her to view her own brush with breast cancer, which brought her face to face with stark reality, as an opportunity to reach out to millions who suffer from this disease in silence and fear.

All these factors were responsible for her and her friends and colleagues at PASSAGES to take on the role of caregivers. Interacting with Dr. Coomi Bharat Singh, Mrs. Valerie Singhvi and Mrs. Kaya Shewakramani, she has put in hours of loving attention to detail and dedicated labour to bring out this second edition.

None of this would have been possible without the generous contribution in terms of knowledge, matter, guidance and many hours of precious time, by Dr. Vijay V Haribhakti, renowned and leading expert in the field.

WHISPERING HOPE, written straight from the heart, is testimony of Tarana's love and concern, and her willingness and capacity to give of herself. Although packed with useful medical content, it fulfills its main purpose to gently caress and give strength. Its message of hope is unwavering.

At PASSAGES we care.....

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LIVING WITH CANCER

TARANA'S MESSAGE:

Whispering Hope was conceived and came into existence in the year 2000. It was born out of a compelling need to alert and awaken friends, family, the neighbor next door, and indeed ALL women, to the realrisk of a not so uncommon disease – Breast Cancer.

At that point, it was entirely **my** need to share.

Now nineyears later, Whispering Hope takes birth again. It's message is as simple but even more compelling.

This is now **your**need to listen and to understand how easy it is to arm yourself and every woman in your life – mother, sister, daughter, aunt or grandmother, with some simple and clear knowledge about Breast Cancer.

A few minutes can bridge the gap between ignorant despair and healthy hope.

Along the way, thousands of copies of this little book have found their way into homes across the world. Translated into Hindi, Marathi and Gujarati, Whispering Hope has helped and supported many. I like to think it **listened** as well as **spoke.**

It relates a not so happy scenario. Breast Cancer is well on the increase, affecting one in twenty five women in the urban setting.

The good news is that the number of survivors has also increased; a clear manifestation of awareness, early detection and improved treatment.

DIAGNOSIS SHOCK

The shock of diagnosis brings a numbing sense of unreality, giving way to fear, depression, anger and a host of other emotions. There is no 'right' or 'wrong' way to feel.

Having travelled the route myself, I can relate to the anguish and sense of hopelessness. The thought of losing your femininity and, possibly, your life elicits vulnerability and terror.

Several years later, I now cherish every day with humbling sense of gratitude.

There are physical and emotional hurdles ahead. Your initial thoughts may well be to protect your children or parents from the burden of the diagnosis. This is understandably so. Yet, you need your family to be there, to listen, and to let you weep without having to put up a brave front all the time.

So, follow your instincts but be kind to yourself first and remember cancer is not a death sentence!

WHY ME?

You will find the answer to that one. Give it time.

As for me, I now treasure small things – a kind gesture, an uplifting text message, a loving email. My husband's support, my children's teasing, my parents' concealed concerns – these are my daily blessings. You will find yours.

Try to share your feelings with a loved one, hard as it may seem. Express your needs. Address your practical concerns. All our relationships are unique, and don't be worried to test the limits of yours.

Don't feel guilty to feel. Anger and shock are expressions of fear. Gradually, you will move from disbelief to reality, from grief to acceptance. Your emotional healing begins from here.

I'M SCARED

I was too.

Ignorance about the disease and the uncertainty about your future can build into monumental fears. You may feel you are losing control over your life and

circumstances. This will lessenas you attempt to understand what is happening and what to expect. Talk to your doctor! Ask! Question! Talk to another patient or survivor!

As acceptance seeps in and your understanding increases, the insecurities and fears will recede.

COPING

Express yourself honestly and openly. You will be pleasantly surprised to find out how many people are ready to listen and support. Realise that in your family and friends lie deep wells of strength for you to draw from. So go ahead and do so!

Never underestimate the power of physical touch. Hugging, or simply holding a loved one's hand and feeling the concern and caring will strengthen you.

Reclaim control over your life. The power of your attitude cannot be emphasized enough. A positive attitude truly has **positive** effects.

Remain realistic. Harness your emotional resources as you prepare for one of life's challenges. Things will return to normal.

Hope is the key word – do not lose it!

SIGNS OF COPING

- Seeking medical facts
- Accepting the diagnosis
- Attempting to remain positive
- Renewing self confidence

WHAT SHOULD I TELL MY CHILDREN?

The truth.....and as much information as you think they can handle. It is natural to protect your children from anything that will make them sad or scared. But remember, children are very perceptive and a child's fertile and overactive imagination can conjure up situations, possibly worse than reality.

My son, who was nine years old then, repeatedly asked me why I withheld my diagnosis from him at the time. My twelve year old daughter rummaged through

my medical books to find out the meaning and implications of carcinoma. She was thrust into the role of mother for her sibling in the harshest way possible. I could have spared both of them a lot of heartache, had I known better then.

Looking back, I realize how often I have drawn strength from my children – more than they realise.

Talk to your children, laugh and weep with them and then reassure them. It's not a perfect world but they will come to understand the comfort of being a family – one unit. Things will change a lot for them too. Prepare them and from that knowledge they will derive strength and security.

UNDERSTAND YOUR OWN NEEDS

- Emotional support from your loved ones
- Practical support in day to day management
- Empathy– it helps when a caregiver sincerely tries to understand what you are going through
- Assurance that you will be loved in spite of the changes that your physical self may endure

• To be your own self – to enjoy the luxury of giving vent to all your feelings and emotions.

I recall waking up at 5 a.m. every morning for my daily spell of solitude, allowing myself to think and feel whatever thoughts came up; weeping if I wanted to. This was my safe space. You will find yours!

THE BIG 'C'

At PASSAGES we care...

Every woman is unique in the way she handles illness. Some want to know all the

facts related o their health, whether cancer or otherwise. Others prefer to leave

everything to their doctor. In the final analysis, your health is, and should be, in

your own hands. Trust your doctor and work with him as a partner. Given the

choice, no one wants to hear, read or talk about Cancer. Sometimes, though, we

don't have a choice. Hence, these facts are worth knowing and remembering and

that is why you need to read on.

Let us first understand the normal anatomy (look) and physiology (function) of the

Breast.

THE BREAST: WHAT IS 'NORMAL'?

Normal Structure and Function

The breasts, or mammary glands, are specialised sweat glands which help in milk

production also known as lactation. They play a role in defining femininity and,

therefore, assume an emotive significance far beyond their biological function.

The breasts are made up of glandsarranged into lobules which finally combine

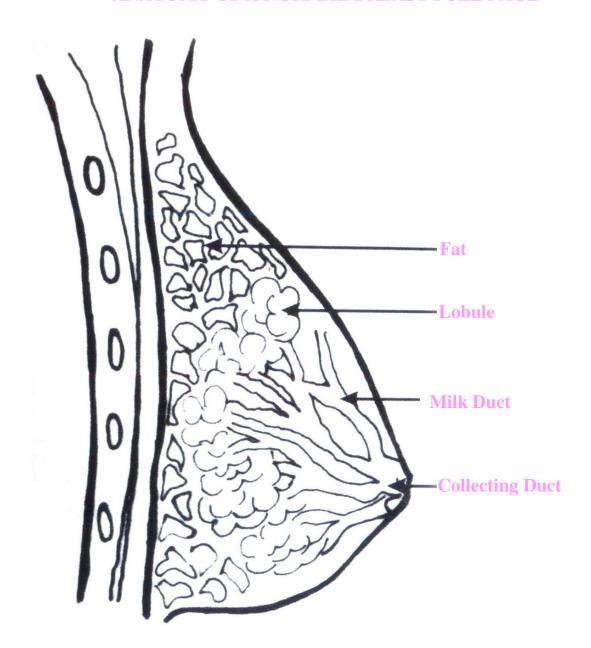
into fifteen to twenty lobes. A branching system of ducts drains the glands; the

lobes finally being drained by lactiferous ducts which converge towards the areola

and finally end at the summit of the nipple. In addition, the breasts contain **fibrous tissue**connecting and supporting its lobes; and fatty tissue and blood vessels in the intervals between lobes.

The tissue fluid (lymph) from the breasts drains mainly into the lymph nodes in the axilla (armpit).

ANATOMY OF A NORMAL BREAST FULL PAGE



VARIATIONS

Mammary glands exist in both sexes. In the male, they remain simple and undeveloped throughout life. In the female, they are underdeveloped before puberty, and grow and get defined thereafter. Their development is most during the later months of pregnancy and during lactation.

Estrogenichormones produced from the ovaries cause the ducts to develop and grow, and progesterone causes the glands to develop. This is accompanied by an increase in the supporting tissue, fat and blood vesselsandis the reason that breasts become enlarged and tender just before the start of the menstrual cycle.

At menopause, all the hormonal stimulation reduces and the breasts reduce overall in size and density.

COMMON CAUSES OF ANXIETY

Cyclical breast pain, nodularity and lumpiness, as explained above, lead to severe anxiety. Often, the sudden appearance of a 'lump' in a young female may actually be a cyst or a collection of fluid. An ultrasound is the simplest non-invasive test to understand the true nature of the 'lump' in a young, pre-menopausal individual. In case of a cyst, no treatment may be required.

THE BREAST LUMP

The majority of breast problems are seen as a localised mass or thickening, labelled as a 'lump'. A painful lump could be a cyst. A true lump is one which is distinct from the surrounding breast substance and can be felt both with the flat surfaces of the fingers and with the flat of the hand; and on ultrasound, appears 'solid'.

Lumps detectable by the fingers but not by the hand flat, frequently represent thickening of glandular breast tissue which is often found in younger women.

Benign lumps

These are 'non cancerous' masses, generally found in younger women. Typically, they have been present for a long time without much change. Examination mostly reveals them to be regular in shape, well-defined and movable. The commonest benign lump is known as a **fibroadenoma**.

Once a benign tumour is removed, it most often will not recur. More importantly, it is not athreat to life because it will not spread locally or to other parts of the body.

Following menopause, the incidence of benign lumps is generally very low.

A malignant lump would classify as Breast Cancer.

BREAST CANCER: WHAT IS IT?

Any malignant mass within the breast is broadly labelled as 'breast cancer'. While

the fate of any individual patient with breast cancer is determined by the type of

malignancy and its anticipated 'risk', an important feature that characterises all

malignant lesions is their tendency to grow and to spread locally and to other parts

of the body.

Cancer cells break away from the main tumour and can spread to other parts of the

body. Spread via lymphatics ends in the lymph nodes and via the blood stream, to

distant organs. This tendency to invade and spread presents danger, and the need

for appropriate treatment.

The spread of cancer beyond its site of origin is called metastasis.

VARIATIONS

The fundamental truth about Breast Cancer is its astounding variability. While it is possible to treat a great majority of malignant lesions of the Breast effectively if detected in time, there are a few that defy all attempts at treatment. These can be termed as biologically aggressive.

Spectrum

The commonest variety of cancer originates in the ducts and is known as Duct Carcinoma.

If the cancer remains within the ducts and does not invade, it is known as Duct Carcinoma in-situ (DCIS).

If the cancer is found to invade into the surrounding tissues, it is known as Invasive Ductal Carcinoma (IDC). This is the commonest variety detected.

Cancers that originate in the lobules is known as Lobular Carcinoma. These can be in-situ or Invasive.

Based on the gross appearance of tumours, other descriptive labels are assigned, such as Schirrus(hard) and Medullary (soft /fleshy).

Other malignant tumours may originate from the supporting tissue of the breast and are relatively uncommon. Among them, the one encountered most often is known as the Malignant Phyllodes Tumour.

Metastatic breast cancer most frequently spreads to the glands in the underarm, known as axillary lymph nodes. Spread can also occur to the lymph nodes in the lower neck and to distant organs such as the lungs, liver and bones.

RISK FACTORS

It is important to note that over 75% of all breast cancers are 'sporadic', i.e. with no known family history.

The heredity of breast cancer is now better understood, and it appears that as many as 6 genes are involved. The risk is highest if a *first degree* relative (mother, sister, grandmother, aunt) has had breast cancer. The earlier the presentation in the relative, the earlier is the commencement of risk.

The other risk factors are as follows:

- Increasing age
- History of breast cancer in the opposite breast
- Early age at menarche (first appearance of menses)
- Late menopause
- Late pregnancy (first pregnancy after thirty years of age)
- Recurrent pregnancy losses (abortions)
- Childlessness
- Lack of lactation (no breast feeding)
- Extendedhormonal treatment with Estrogens / oral contraceptive use
- Dietary factors: diets rich in saturated animal fats and obesity
- Lifestyle & Habits: Alcohol / Smoking
- Community: Certain communities (Parsis / Sindhis) are at higher risk than others

The epidemiology, i.e. the occurrence, transmission and control of Breast Cancer is most affected by lifestyle choices, habits and diet. For example, a lady from Japan (lowest incidence) immigrating to the US (highest incidence) will achieve the same risk as the local population after just ten years in the new environment.

WARNING SIGNS:

• Painless, apparently causeless lump or thickening within breast or armpit

• Recent nipple retraction (in-drawing)

• Nipple discharge (especially if blood stained)

• Alteration in texture of skin overlying breast (dimpling / puckering)

A change in the size or shape of the breast

BREAST SELF EXAMINATION (BSE)

The single most important thing you can do today to reduce your risk from

advanced Breast Cancer is to do a monthly Breast Self Examination(BSE).

The best time to perform a BSE is about one week after the beginning of

menstruation. In post menopausal women, it can be done at the beginning of

each month.

WHEN

Monthly: Morning or evening is the best time to perform self examination.

Pre-menopausal: Perform breast self examination 7 to 10 days after the start of

your period.

Post-menopausal / Post-hysterectomy*: Mark a day on the calendar, preferably

the first day of each month.

Even with self examination, it is important to see your doctor for an annual

checkup.

If you discover something unusual visit your doctor. That same visit may

save your life.

If you are over 50, then you should have a mammogram every year (or as

recommended by your doctor).

*Post-hysterectomy women whose ovaries have not been removed should choose

a time during the month devoid of "pre-menstrual" symptoms, when they have

tender, swollen breasts.

WHERE

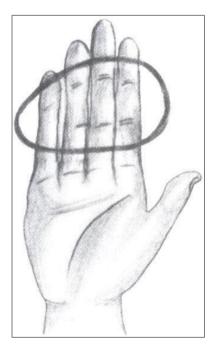
Visual Check: The first step of your examination should start in front of your

mirror.

Lying Down: This last step is conducted lying down on a firm or flat surface.

How to do it:

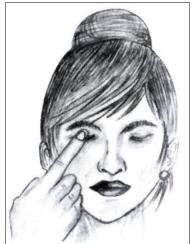
- Do not dig into the breast tissues with the end of your fingertips or nails. This is a frequently made mistake
- Always use the pads of your fingertips when performing this technique.



WHAT TO LOOK FOR

- It is important to learn what is normal for your breasts
- By examining your breasts monthly, you will become familiar with how they look and feel
- It may be normal for them to feel a bit lumpy
- Check for any areas in your breasts that feel thicker or harder than the rest of your breast.
- There are two sensations to be aware of: **Smooth and slippery:** This is sensation associated with the normal milk glands and ducts in your breast, as well as many harmless breast cysts.

- Be aware that a small percentage of smooth and slippery lumps may require professional attention.
- To familiarize yourself with this sensation,
 place the bulb of your index finger on your
 closed eyelid.
- Gently move the eyelid over the surface of your eyeball. You will sense that the eyeball is smooth and slippery.



Hard, fixed and immovable: This sensation may not be harmless and may require further investigation.

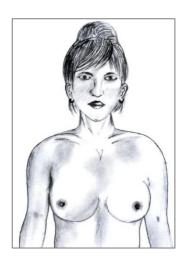


- Try to move the skin without moving the tip of your nose.
- It will not go: It is fixed, so the tip of your nose moves with the skin.
- O To familiarize yourself with this sensation, place the bulb of your index finger on the tip of your nose.

AREA OF EXAMINATION

- Examine the area from your neck to the underside portion of your breast and from the armpit to the breastbone.
- Also check for any nipple discharge.





Step 1

- First sit or stand in front of the mirror with your arms relaxed at your sides.
- Face forward and conduct check; then turn slowly to each side.

Note: Check each breast for any changes in size, shape or contour.

Step 2

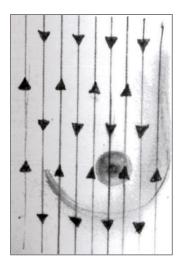
- Raise your arms straight above your head.
- If your breasts are large you may need to lift each breast to see the lower part of the breast area.

Note: Look for obvious lumps, dimpling, flattening,



reddening, sores or rashes.

• Also look for any changes in the nipples.



Step 3

Vertical Strip method: Start in your armpit and move down to just below your breast.

- Move your fingers over the width of one finger
- Move up again
- Continue this up and down pattern

Step 4

- Lie down on a bed or flat surface
- Examine your breasts using one of the methods described in step 3.

Note: Use had lotion to make your fingers more sensitive.



Step 5

- Roll to one side and place your arm behind your head
- Put a pillow or towel under your shoulder for support

Note: Examine the outer side of your breast and underarm area. Do the same for the other breast.



DIAGNOSIS

Breast cancer may be diagnosed through a screening test (mammography / sonography) in the absence of any apparent abnormality. In countries that have an active screeningprogramme, it is known that screen-detected cancers are typically found early.

Most frequently, it gets diagnosed when a woman notices one of the warning signs either incidentally or in the course of breast self examination and consults the appropriate health professional (ideally a surgical oncologist with special interest in breast cancer).

The importance of seeking evaluation from a professional experienced in the management of Breast Cancer cannot be over-emphasized. This would avoid late / missed diagnosis, and ensure appropriate treatment strategy.

ASSESSMENT OF A BREAST LUMP

The three main pillars for a reliable diagnosis of breast cancer are:

- Clinical Examination
- Imaging (mammography / sonography / MRI)
- Biopsy (Core biopsy / FNA)

These constitute the vitally important **Triple Assessment** which must be made in every case of suspected cancer.

Clinical breast examination begins with an inspection of both breasts with the woman sitting up, in order to detect subtle skin changes such as dimpling. A detailed manual examination (palpation) then follows and must systematically include the complete extent of either breast (from the collar bones above to the chest wall margins below), either starting centrally from the nipple and moving

outward in concentric circles, or a 'vertical strip method' examination. Examination is first performed using the flat surfaces (not the tips) of the fingers and then the flat of the palm. Any palpable lump is characterised in detail (size, shape, tenderness, mobility and freedom from overlying skin), before moving on to a detailed palpation of both underarms for presence of suspicious nodes. Finally, the areas below (infraclavicular) and above (supraclavicular) the collar bone are examined and findings documented. The very same manoeuvres are carried out in the practice of breast self-examination, and must be understood thoroughly by every adult woman.

Imaging of the breast can be performed with a variety of methods, amongst which **mammography** is the most frequent and most important. In very young women, the presence of dense glandular tissue frequently limits theusefulness of mammography. Another drawback of mammography is its inability to distinguish a fluid-filled (cyst) from a solid mass. For these reasons, **sonography** is preferred in younger women. The combination of these two imaging techniques generally provides optimal information in most cases. Additionally, these modalities provide guidance for core biopsy, which is considered the minimum standard for diagnosis of a suspicious mass.

When the information derived from both is found insufficient, the preferred imaging technique employed today is the **MRI** scan. Although extremely useful, MRI scanning is used selectively owing to its high cost.

In all cases of suspected or proven cancer, good imaging is essential for good treatment decisions, and for providing assistance for an adequate biopsy.

Biopsy is the essential starting point of all treatment modalities, and the ideal biopsy is one with which we obtain not only a reliable tissue diagnosis but all the additional information necessary for a sound plan of treatment. In any suspected malignancy of the breast, the *core biopsy* provides this vital information.

FNA or **fine needle aspiration biopsy**, though easier, is fraught with numerous drawbacks and is best reserved to prove a relapse, locally within the breast, or to an enlarged suspicious node found on examination or ultrasound imaging, or to any other area of the body. In all such cases, all other important information is assumed to be available. If note, core biopsy is preferred.

QUESTIONS TO ASK YOUR DOCTOR AFTER A POSITIVE BIOPSY REPORT

- An explanation of the biopsy report
- What is recommended now lumpectomy or mastectomy? Why?
- Will an axillary dissection (removal of the lymph nodes in the armpit) be done at the time of surgery? What type?
- What other tests are needed?
- What is the likely further treatment after surgery?
- Is it possible to estimate risk?

WHAT NEXT?

At PASSAGES we care...

The management of breast cancer is invariably a team effort. Gone are the days when surgery, most notably radical surgery, was considered the norm. As an understanding of the disease process has improved, doctors have found newer and often more effective means of treatment which have resulted in improved survival while preserving quality of life.

In light of a biopsy report that tests positive for malignancy, it is important to assess the extent or 'stage' of the disease.

THE IMPORTANCE OF 'STAGE'

The most widely accepted staging system is known as the **TNM** system, i.e. **Tumour, Node, Metastases** system.

Broadly speaking, 'T' indicates primary tumour size, and covers the whole spectrum from 'T0' which indicates no clinically felt tumour (picked up on screening tests) to T4c, which indicates a large tumour greater than 5cm in diameter, with involvement of the overlying skin and the bony chest wall.

The 'N' stage is a reflection of the extent of lymph node involvement, and ranges from 'N0' which indicates no involved nodes, to 'N3' which indicates involved nodes above the clavicle (collar bone).

The 'M' stage is a reflection of spread (metastasis) beyond the breast and axilla, and can be either 'M0' which indicates no distant metastasis or 'M1' which indicates presence of distant metastasis.

All three elements are expressed in a composite **TNM stage**, which is the common language used to express disease extent. The staging is generally expressed at two points of time:

The Clinical stage (cTNM) is expressed following clinical examination and investigations; while the Post-surgical stage (pTNM) is expressed following a detailed pathologic study of the specimen removed at the time of primary surgery.

PREDICTIVE INDICATORS:

Apart from the TNM stage, which is the most important expression of disease extent and possible outcome, numerous predictive indicators are now studied routinely from the tumour tissue, and the information obtained is used to determine both — **prognosis** (prediction of possible long-term outcome), and **further treatment strategy.**

This assessment becomes particularly relevant in early staged disease, and allows effective, individualised (tailor-made) treatment strategies. Numerous predictive markers have been described, and only those with significant importance are discussed here:

A. Grade

While the stage expresses disease extent, the 'grade' expresses microscopic characteristics as seen and interpreted by the pathologist.

The traditional grading system includes three grades, I II and III, in ascending order of potential biologic aggressiveness. The most accepted current system of grading (known as the Nottingham modification of the Richardson-Bloom or R-B grade) is based on three microscopic characteristics, each having a minimum score of 1 and a maximum of 3. Each of the 3 scores is expressed individually as well as the sum, in the final report. Accordingly, a 'low risk' tumour would have a combined grade score of 3 (1+1+1), while a 'high risk' tumour would score 9 (3+3+3).

B. Receptors

Current understanding of breast cancerhas established clearly that many tumours are 'Hormone dependent' and express receptors for the normal female hormones.

Accordingly, we have Estrogen Receptor (ER) expression and Progesterone Receptor (PR) expression.

In general, those tumours that are rich in Hormone Receptors (ER / PR) are known as 'Receptor Positive' and are associated with response to hormonal treatment and a favourable predicted outcome. Conversely, 'Receptor Negative' tumours tend to be more aggressive, are more commonly found in younger patients, and need systemic chemotherapy for improved control.

C. Gene / Oncogene Expression

Continuous and ongoing research on breast cancer has resulted in an improved understanding of the role of genes for promoting cancer. Amongst the several genes that have been identified, a few are important and their identification has resulted in the development of novel targeted therapies. The Her-2 (Cerb B2) oncogene is found to be expressed in a number of cases and predicts unfavourably.

Typically, Her-2 positive patients are ER negative, and need aggressive chemotherapy and a targeted drug called Herceptin.

As many as six distinct genes are associated with familial breast cancer. Among these, the BRCA 1 & 2 is best known, and can be demonstrated in about 15% of patients with a strong family history. This testing is expensive and its importance is uncertain.

TREATMENT PLANNING

At the end of a sound 'triple assessment' mentioned above, a treatment plan is made. With a few exceptions, the initial treatment is surgery, which involves taking the tumour out surgically. Based on the detailed findings following adequate primary surgery, a decision is made about further adjuvant (aiding or assisting) treatment /s.

Typically, these could include one or more of the following:

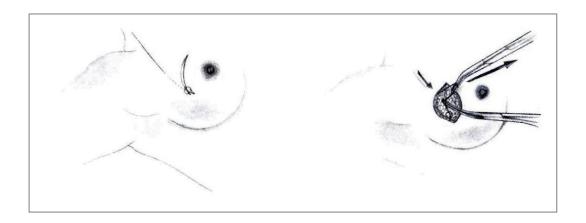
Chemotherapy / Radiotherapy / Hormone therapy / Targeted therapy.

Surgery and Radiotherapy are localised treatments, whereas chemotherapy and hormone therapy act on the entire system.

SURGERY

Surgery is the most common treatment of Breast Cancer. Surgery for the primary tumour involves either a complete removal of the disease only (lumpectomy) or the entire breast (mastectomy).

Wire guided localization biopsy



This is a frequently carried out procedure for diagnosis and management of lesions that are suspicious but cannot be felt on palpation.

Lumpectomy

A lumpectomy involves removal of the entire lump along with a significant margin of surrounding normal healthy tissue. This is a Breast Conservation Treatment

(BCT) and would need to be followed by Radiotherapy.

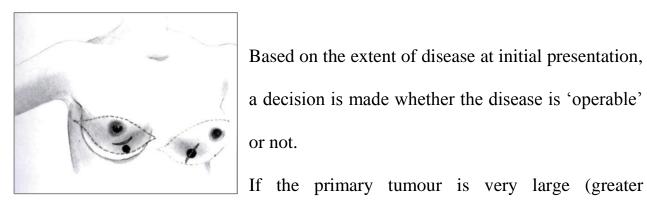
Common incision plans: breast conservation

Numerous reliable studies have clearly established the safety of breast conservation in all appropriately selected patients.





Mastectomy



Based on the extent of disease at initial presentation, a decision is made whether the disease is 'operable' or not.

than5cms), fixed to the chest wall or the overlying skin, surgery is generally deferred and appropriate systemic treatment (Chemotherapy / Hormone therapy / Targeted therapy) is started. Once the lesion has shrunk, surgery can be done.

In the remainder, mastectomy is performed. The common reasons why mastectomy is performed are:

- Multiple areas of disease (multicentricity)
- In pregnant women to avoid harm to the foetus through radiation
- Previously irradiated breast (i.e., subjected to or treated with radiation)
- A large tumour relative to the size of the breast
- In those patients who cannot receive radiotherapy

For selected patients who have tumours that are large or oddly situated foroptimal breast conservation, innovative approaches have been described (Oncoplastic surgery) to achieve aesthetically superior results.

In general, all patients who get breast conservation need post-operative radiotherapy. Following mastectomy too, radiotherapy is needed with large-sized tumours, multiple involved nodes, or both.

For the Axilla:

All patients who present with enlarged, suspicious nodes, either on clinical examination or imaging or FNA need a formal removal known as 'Axillary Clearance'. The extent of clearance is dictated by the situation in each individual

case. A very aggressive clearance frequently results in a variety of post-treatment problems such as prolonged lymphatic drainage, loss of sensation on the inner arm, and most significantly, swelling of the arm (lymphedema).

Since a large number of patients are 'node negative', routine 'Axillary Clearance' in all cases is associated with avoidable and significant morbidity. For these patients, the standard of care today is a **Sentinel Lymph Node Biopsy**. This procedure calls for specialised training, set-up, team-work and equipment, and must be undertaken only by the trained surgeon.

RECONSTRUCTION

Mastectomy clearly does not mean permanent disfigurement today. Sophistication of techniques of mastectomy (Skin Sparing Mastectomy) and the availability of a number of techniques of reconstruction have made it possible to restore form in the majority.

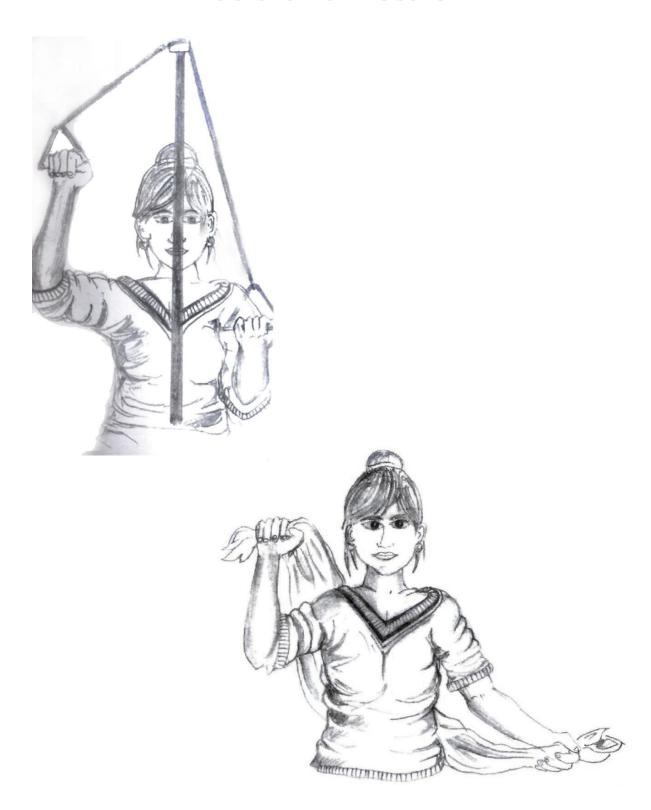
Broadly speaking, reconstruction may involve the use of implants and / or the patient's own tissues (flaps) to achieve the desired result.

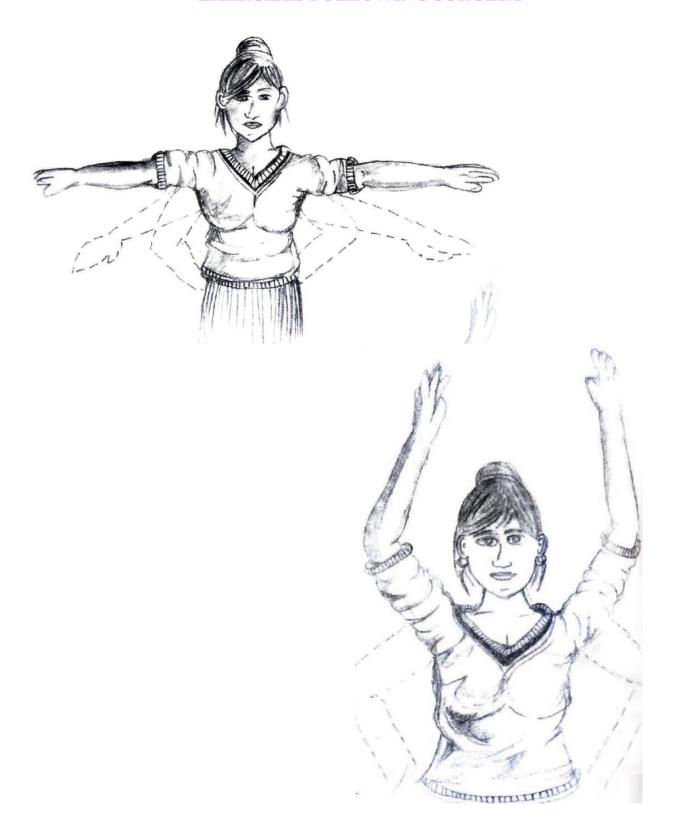
QUESTIONS TO ASK YOUR SURGEON BEFORE SURGERY

- What kind of surgery do you recommend for me?
- If I have a mastectomy, will I be able to have a reconstruction?
- Will this be done at the time of surgery or later?
- Will my lymph nodes be removed?
- What side effects should I expect?
- How do I take care of my arm?
- When can I resume my normal activities?

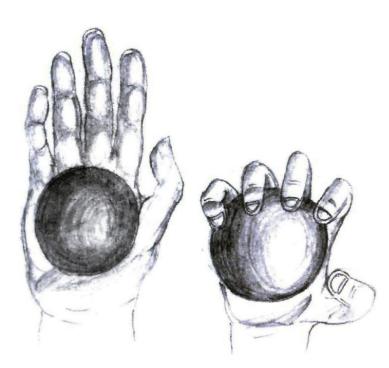
QUESTIONS TO ASK YOUR SURGEON AFTER SURGERY

- What was the pathology report?
- How many lymph nodes were removed? How did they test positive or negative? If positive, how many were so?
- Did the tumour have clear margins?
- What were the results of hormone receptor studies?
- What were the results of special tests (HER-2, p53, etc.)?









Pendulum Exercises





CHEMOTHERAPY

Chemotherapy (anti-cancer medication administered mostly by the intravenous route) has truly brought about a revolution in the way breast cancer is managed today. The drugs are given in 'cycles' at regular intervals, usually three weeks apart.

A large number and variety of agents are in use today and the details of 'which drug, when, and for how long', need to be carefully individualised by the medical oncologist.

If chemotherapy is started 'up front' to achieve reduction in disease stage, it is known as neo-adjuvant chemotherapy. When used after surgery, it is known as adjuvant chemotherapy.

Another important 'advance' in the way chemotherapy is administered is the long-term intravenous access device known as the **Port**. In patients with very few usable veins, the Port is invaluable.

Much of the morbidity associated with difficulties in locating veins, venous thrombosis, swelling, pain and effects of spillage outside veins is completely avoided with the routine use of Ports today.

A port is surgically implanted under the skin which in turn leads to a silicone tube that is inserted into one of the major veins of the body. This device can be used repeatedly and can be maintained for long periods of time, thus greatly facilitating the delivery of chemotherapy.

SIDE EFFECTS OF CHEMOTHERAPY

Undoubtedly, chemotherapy has undesirable side-effects and they must be understood and appropriately prevented or managed.

The most dreaded side-effect of chemotherapy, nausea, is effectively preventable with medication available today. Another side-effect is fall in blood counts (white cells) which makes patients susceptible to infection. This is managed by:

- regular monitoring of counts,
- preventive advice (avoiding contact with infected individuals / consuming clean, cooked food)
- by the use of drugs that improve recovery of counts

Alopecia, or loss of hair, is another effect which is completely reversible on completion of treatment. During therapy, it must be managed by the most appropriate means in a given case. You may consider getting the hair shaved when the hair fall gets severe (usually between the 1st and 2nd cycle). It may be less traumatic than clutching a handful of hair every few minutes.

Elegantly designed caps, hairdos and wigs can all be used to tide over this understandably difficult phase.

The menstrual cycle may or may not be affected during chemotherapy. In premenstrual women, it usually resumes a while later, although when exactly may be difficult to determine. After treatment, the child bearing ability will be dependent on the age and drugs received.

PRECAUTIONS DURING CHEMOTHERAPY

The possibility of an infection may be reduced by taking a few simple precautions:

- Eat well and get as much rest as possible
- To overcome nausea, eat smaller and more frequent meals
- Drink plenty of fluids for hydration
- If there is an altered taste sensation, avoid those foods which cause bitterness

- Avoid alcohol
- Brush the teeth gently and rinse frequently with antiseptic mouthwash or warm saline water
- Stay away from crowds and from anyone with a cough, cold or contagious infection
- Maintain good hygiene daily, using a soft towel after a gentle bath
- In case of temperature or infection, contact your doctor immediately
- Keep your nails short and exercise care while cutting them
- Eat only home cooked meals, and avoid raw vegetables and salads
- Wash fruits thoroughly
- Drink only boiled or filtered water

QUESTIONS TO ASK YOUR DOCTOR BEFORE CHEMOTHERAPY

- Why do I need chemotherapy?
- What drugs do you recommend?
- What are the benefits and the risks to me with these drugs?
- How will I know that the drugs are working?
- Where and how will I receive these drugs?
- How long will I be on chemotherapy?

- What are the common side effects of these drugs and how do I manage them?
- Will there be any restrictions on my normal activities?
- Can I continue to work while on treatment?
- Are there any long-term effects I should know about?
- What if I decide not to have chemotherapy?

RADIATION THERAPY

Radiotherapy is a local therapy by ionising radiation, employed to minimise the risk of local relapse. During radiation, high energy x-rays are used to destroy cancer cells that may be present in the breast or lymph nodes.

The routine use of radiotherapy following breast conservation approaches has resulted in excellent rates of control and preservation of form and body image.

Typically, radiation is started after completion of chemotherapy and delivered to the entire breast, along with a boost to the location of the primary tumour (tumour bed), and to the area above the collar bone in patients with positive nodes. The duration of treatment is five to six weeks, usually five days a week and the procedure takes eight to ten minutes at each sitting.

During the planning stage, the chest is marked with ink or tattoos to define the area to be radiated. The Radiation Oncologist decides the daily radiation dosage.

In general, radiotherapy is well tolerated and only in the last weeks of treatment may result in dryness, discoloration and occasional peeling of the skin of the treated breast. In most cases, these effects reverse completely following completion of treatment.

Adverse effects are best minimised by maintaining the skin dry and avoiding perspiration while on treatment.

In selected patients who have metastases to bones, local radiation results in effective control of symptoms.

SIDE EFFECTS OF RADIOTHERAPY

The skin in the treated area will tend to be dry, red, tender and itchy. Towards the end of treatment, the skin may become moist and 'weepy'. Try to keep this area open and exposed as far as possible. These changes are temporary and will get resolved when treatment is over.

Long-term effects would include changes in the shape and colour of the breast or a feeling of heaviness due to fluid retention. Sometimes, the breast skin becomes more sensitive.

Once a breast has been irradiated, it cannot be irradiated again. Any local recurrence or new tumour would have to be treated by mastectomy.

PRECAUTIONS DURING RADIOTHERAPY

- Eat a well balanced diet
- Drink plenty of fluids
- Get as much rest as you can

Skin precautions:

- Avoid tight or constricting garments / undergarments
- Avoid the use of soaps, lotions, deodorants, medicines, powder or cosmetics on the treated area
- Do not wear starched clothes
- Do not apply heat or cold to the area
- Avoid taking any medication without telling your doctor

QUESTIONS TO ASK YOUR RADIATION ONCOLOGIST

- How many sittings will I need?
- What side effects should I expect?
- Can I continue working during treatment?
- Will I be able to come for treatment by myself?
- Will follow-up care be necessary?

LYMPHEDEMA

Lymph nodes in the armpit drain the lymphatic fluid from the arm and chest. A possible side effect of lymph node removal is persistent and often painful arm swelling, called lymphedema. Both surgery and radiation can affect the lymphatic drainage of the arm.

This swelling can occur at any time after the surgery and, hence, the arm will always need to be protected.

PRECAUTIONS TO HELP PREVENT LYMPHEDEMA

- Avoid wearing tight jewellery, rings or watches on the affected arm
- Avoid carrying packages or lifting weights with the affected arm
- Ensure that all blood tests or infusions are conducted on the other arm
- Avoid cuts and injuries of any kind
- Have careful manicures
- Be careful about insect bites and stings
- Wash cuts promptly
- Do not expose the arm to extreme temperatures
- Treatment of lymphedema would include options such as an elastic sleeve, arm massage, or manual lymphatic drainage.

AVOIDING EDEMA

- Discuss nature of Axillary dissection. If the axilla is clinically clear, make sure to find a surgeon trained to perform sentinel lymph node biopsy
- Avoid wearing jewellery, watches, etc., on the operated side
- Avoid blood collections and blood pressure cuffs on the operated side
- Avoid excess heat exposure
- Learn to heed the signs of infection: fever, redness, pain, warmth of the operated arm

- Monitor mid-arm and forearm circumference and compare with opposite side
- Be regular with arm stretching exercises and shoulder mobilisation

MANAGEMENT OF LYMPHEDEMA

- Arm elevation: at rest as well as during exercises
- Arm stretches; milking exercises
- Bandaging and sleeves
- Avoid forceful massage
- Go for Manual Lymphatic Drainage by qualified personnel
- Supervised use of diuretics, antibiotics, NSAIDs

EXERCISES FOR MANUAL LYMPHATIC DRAINAGE





HORMONAL THERAPY

Hormonal therapy involves use of drugs that block the effects of female hormones (estrogens) which are known to promote tumour growth in ER +ve patients.

All patients who are 'ER +ve' experience significant benefits with hormonal treatment.

In younger, pre-menopausal women, the main drug available is known as **Tamoxifen**, which is relatively inexpensive and available in tablet form. It remains a useful drug even today and has saved millions of lives. Although in use mainly for pre-menopausal women, it is also effective in menopausal women, though less than the newer drugs available.

Typically, it is started following surgery and chemotherapy and is continued for five years.

Although well tolerated by the majority of patients, the undesirable side-effects are as follows:

- Hot flashes are common and can become very uncomfortable. They are known to reduce with continued use of the drug.
- An important adverse effect is stimulation of the lining of the uterus, very
 occasionally resulting in uterine cancer. Thus, all patients on Tamoxifen
 must have regular ultrasound assessment to measure thickness of the uterus
 lining.
- Finally, Tamoxifen is known to increase the stickiness of blood, which results in clot formation (deep vein thrombosis). Thus all patients 'at risk' (those undergoing pelvic surgery / taking a long flight) need adequate preventive measures, that include temporary stoppage of the drug.

Another drug, Goserelin, is now available to reversibly stop ovarian function in young, receptor positive ladies who get back cycles despite chemotherapy and Tamoxifen. Available as a 'once-in-three-weeks' injection, it is generally given for a period of two years.

In the treatment of post-menopausal ER +ve breast cancer, a variety of new drugs are now available.

The most important is a class of drugs known as Aromatase Inhibitors. Three agents are currently available, with generally similar effects: Anastrazole, Letrazole and Exemestane.

The selection of drug in a given case is generally the prerogative of the clinical oncologist.

It is essential to test the bone density of all patients due to be put on Aromatase inhibitors. The most reliable method is known as a **Dexa Scan**for bone densitometry. If there is diminished density (osteopenia / osteoporosis), these patients need to be protected by a medication known as **Zoledronic acid**, available in injectable form and to be given as required. There is evidence that zoledronic acid independently confers an advantageous effect in all receptor +ve patients.

Apart from osteoporosis, Aromatase inhibitors occasionally produce significant joint pains and deterioration of the lipid profile. These effects appear to diminish with continued use of the drug. Strangely, the occurrence of side-effects is associated with improved disease control. Thus, adequate attempts must be made to control and reverse side effects rather than stop the medication.

The newest hormonal (anti-estrogen) drug is known as **Fulvestrant**, which acts by a different mechanism. For the most part, it is used in second-line therapy when initial therapy with either Tamoxifen or Aromatase inhibitors has failed. It is administered as a 'once-a-month' intra-muscular injection, and has remarkably few side-effects.

TARGETED THERAPY

The most important advance in this direction came with the development of a drug known as Traztuzumab (Herceptin), specifically targeted against the 'HER-2' oncogene. All studies have validated its use with 'Her-2 +ve' disease.

The drug has important cardiac side effects and its use must be carefully monitored. Clearly, it cannot be used along with chemotherapy drugs (Adriamycin) that are toxic to the heart.

The major problem is the prohibitive cost and the long duration of therapy needed (52 weeks).

Other agents that are in use are Bevacizumab (Avastin) and Lapatinib (for brain secondaries). Their use must be selective and under very careful supervision.

QUESTIONS TO ASK YOUR DOCTOR ABOUT HORMONAL THERAPY

- What is the benefit of this treatment for me?
- What are the side effects and how do I manage them?
- How long will I be on hormonal therapy?
- What follow up care will I need?
- What if I miss a dose?
- What if I decide not to take the treatment?

MIND AND BODY CONNECTION

At PASSAGES we care...

A wise person once observed that the real goal of living is to 'die young as late as possible'. There is convincing evidence that you can improve your odds of reaching a ripe old age while you are still young at heart. The key is to make sure you stay interested in and connected to the world around you.

- Do emotional and mental states play a significant role in susceptibility to and recovery from disease?
- How powerful is prayer? Can faith heal?
- What accounts for medical miracles? How does a patient declared incurable by his doctors find the internal resources to cure himself?
- Are certain personality types predisposed to cancer?

THE POWER OF SPIRITUALITY AND FAITH

While some of these questions are still being debated by science and religion, there is no doubt today that they both increasingly agree that spirituality may be very good for health. Doctors know that there is sometimes a mysterious connection between a patient's faith and her recovery. While they have not become faith healers, they have become aware of the research, much of it published in foremost medical journals, that shows the positive impact of faith on health. Medical researchers have applied science-based methods to explore the relationship

between religious devotion and health. Preliminary results suggest that people who derive strength from faith are healthier and live longer than those who do not.

Faith in a higher power may extend your life. This is partly due to the way it can strengthen your trust in your immune system.

STRENGTHEN YOUR IMMUNE SYSTEM

A healthy body teems with many millions of different white blood cells that work together to search for and destroy viruses and bacteria. Boosting your immune system, the body's own amazing fighting forces and healing powers, may sound frightening but new findings about lifestyle and the robustness of your immune system reveal that little things really do mean a lot – a brisk walk, an extra scoop of nutrient-rich fruit salad and some time for relaxation with people who make you most happy. The body is wonderfully regenerative and a few simple changes can coax your internal army of white blood cells into fighting shape in just a few months.

In fact, the new thrust in immune system research has shown that drugs such as Herceptin for breast cancer, designed to bind to signalling molecules on tumours and disrupt cell growth signals, perform a second role which drug companies have paid scant attention to until recently: flagging the immune system to kill cancer.

EMOTIONS AND THE ROLE THEY PLAY IN YOUR STATE OF HEALTH

Just as love, friendship and faith help to boost your immune defences, negative emotions and their disruptive expression take a toll on them. Anger, hostility and hopelessness do the most harm. It is, therefore, wise to gain control of these emotions.

Stress hormones and other chemicals surge through our bodies affecting almost every organ, when we are angry. Anger and stress have similar physical effects in most ways; but an added element of emotional arousal makes anger even more harmful. It is also common to react to anger by suppressing it, but this is a poor choice in terms of your health.

Suppressed anger affects the body much the same way as chronic stress or unexpressed grief does, and may lead to a host of physical problems, at the same time draining your energy and weakening your ability to ward off infection and disease. Conventional wisdom states that suppressed anger can even lead to cancer. There is evidence to suggest that bottled-up anger is, indeed, a factor in the growth of cancer.

Get a grip on your anger

The next time you feel your anger is about to get the better of you, get a handle on it by these few simple actions which may help keep you from doing or saying anything that you may regret later:

- Take a step back to recognise your anger and label it
- Express your anger. Just saying the words, "I'm really furious!" can help to defuse the emotion
- Remind yourself that "this will pass". Cool off
- Leave the room
- Splash cold water on your face
- **Breathe easy**. Take two or three deep breaths and count to 10.
- Slowly and intentionally **wipe away your angry expression** by clenching and relaxing your jaw, forehead and mouth.
- **Redirect your energy**. Do something physical like taking a walk, or doing a fast-paced 20 minutes on a treadmill, to use up the adrenalin in your

bloodstream. Painting, drawing, clay modelling, reading and other activities that provide satisfaction can also help to calm you.

• **Heal your angry past**. **Practice forgiveness**. A simmering grudge can provide enough irritation to maintain your anger. Refusing to cling to resentment can provide long-term relief from your own negative emotions.

Other negative emotions like hostility and depression or sadness should also be tackled before they lead to long-lasting harmful effects.

A POSITIVE ATTITUDE AND HAVING AN 'ATTITUDE OF GRATITUDE'

It is clearly evident that where illness is concerned, 'attitude' is of extreme importance. As early as in 1978, Dr. Bernie S. Siegel started a therapy group for exceptional cancer patients. Members were encouraged to participate aggressively in their own therapy by asking questions, expressing their emotions and marshalling positive feelings. At the end of the programme, Dr. Siegel was amazed at the results, which established a strong link between bodily health and the patient's mental state. In the ultimate analysis, "all healing is scientific, even if science can't yet explain exactly how the unexpected 'miracles' occur." (Siegel, 1990).Indeed, the real issue is no longer whether the mind and emotions affect the

course of treatment. The question is how to direct them most effectively in support of it.

HARNESS THE HEALING POWER IN NATURE (HERBAL MEDICINE)

Nature is an abiding source of inspiration for many people and abounds with miraculous healing powers. Humankind has been accumulating and utilising herbal knowledge for at least 60,000 years. The use of herbs, safely and effectively, as an allied therapy, is an area of growing interest and the focus of research around the world. Many herbs have healing properties and herbal medicine is based on the principle that plants can have a potent physiological effect on the body.

When the body is undergoing the ravages of aggressive therapy in the treatment of cancer, you can cultivate, harvest and preserve your own herbs or buy them; make your own herbal remedies by infusion, decoction, syrups, tinctures, poultice, massage oils and fragrant inhalants, to help you cope with the harsh side effects of the treatment. Homeopathy, Ayurveda and Bach Flower therapies make use of the potent medicinal properties found in plants. Herbs like basil, chamomile, arnica, aloe vera, ashwagandha, Echinacea, garlic, grape seed extract, green tea and

liquorice are only some of the useful plant chemicals used as complementary herbal treatments in the management of cancer.

AYURVEDA

Ayurvedic medicine has been practised for over 5,000 years. The remedies are based essentially on plants; about 1,230 varieties are used. At first, its knowledge was passed on orally by spiritual teachers but from around the 8th century BC, it was gradually set out in a number of medical treatises. Its use spread throughout Asia and has influenced other medical traditions, particularly in Tibet and China.

In Ayurvedic medicine it is thought that good health depends on a harmonious relationship between the three fundamental forces of energy, or doshas, which govern all living processes. They are the:

- Vatta the principle of air and movement
- Pitta the principle of fire and transformation
- Kapha– the principle of water which ensures cohesion and support

This ancient Indian science for longevity and health, aims at a balance between body, mind and spirit through:

Pranayama or deep and conscious breathing

- Yoga, ancient Indian system of exercise for the body and mind
- Vegetarian diet
- Herbal remedies

At birth all people receive a personal combination of doshas which determines their basic physical constitution and susceptibility to illness. Ayurvedic medicine takes into account the temperament conferred by the doshas as well as an individual's current emotional state and way of life.

Herbs traditionally used for detoxifying the body include aloe vera (kumara), Persian lilac (neem) and Indian gum myrrh (guggulu). Western herbs Echinacea and Goldenseal have similar purifying properties. Rejuvenating herbs include Amalki (Indian gooseberry), Ashwagandha (winter cherry), Shatavari (Indian asparagus) and Bala (country mallow).

BACH FLOWER THERAPY

Bach flower drops beautifully understand the human mind and each essence is representative of a human emotion. They act at the mental level, supporting and soothing at the emotional level.

Some examples are:

- **Star of Bethlehem** This remedy is given to patients who experience a shock on learning that they have cancer
- Mimulus These drops are given to patients who encounter fear before surgery, chemotherapy, radiation, etc
- Mustard Patients who have lost all hope to fight their cancer are treated with mustard.

BIOFEEDBACK TRAINING

Biofeedback is a method of gaining conscious control over many bodily reactions involved in creating wellness by monitoring your own emotional state with specially designed equipment. Proponents of this training, point to its success in treating with emotional problems and in stress reduction. Biofeedback is the first medical validation of the theory that **the mind can create and relieve illness.**

HOMEOPATHY

In homeopathy, health is defined as a state of complete physical, mental, and spiritual well being. The origin of cancer is linked to a breakdown of health at all three levels. Holistic therapies like homeopathy and Bach flower essences play a useful role in treating and strengthening the mind-body connection.

The importance of the human mind in the development of cancer cannot be undermined. From the moment a 'cancer diagnosis' is made known, the patient along with his entire family experience a gamut of emotions such as fear, anxiety, disappointment, confusion and despair. As time passes by during treatment, these 'negative' states accumulate layer by layer affecting the general feeling of wellbeing of a patient.

Coupled with this, the scenario of being treated in a super-speciality hospital by specialists and shunting between different departments gives rise to an 'unknown fear' each time a new specialist is met. The most common mental states felt by patients at this time are fear, confusion, loss of a sense of direction, persecution complex, lack of reassurance and ultimately a state of hopelessness.

Hence, the importance of undergoing a 'holistic therapy session' to unfold the burdening layers of negative emotions, which often stem from causative factors of grief, anger, resentment and hatred at the mind level. The patient recounts the story of her life and as she talks she realises the burden of negative emotional states she has been carrying. Infusing and injecting positive feedback along with some reassurance, help the patient to feel 'fresh' and 'charged' to fight the disease.

Constitutional treatment wherein a single remedy is given after understanding the life history of a patient is the mainstay of treatment. It acts at the level of the tendency – predisposition level. It also helps to strengthen the immune system and withstand the onslaught of chemotherapy, radiation and surgery.

Target remedies, such as Calendula among others, are administered to patients for faster recovery from surgery, and to reduce side effects of chemotherapy and radiation.

ISCADORTHERAPY

This is an immune-stimulant therapy which helps and supports the immune system at every stage of cancer treatment. It strengthens and stimulates white blood cells to attack cancer cells and control the tumour.

Iscador is made from the Mistletoe plant and given in the form of small 1cc injections. It has no known side effects.

MACROBIOTICS

The practice of macrobiotics began in Japan as a personal philosophy involving wholesome living and eating. Macrobiotics believes that illness cannot be present in a balanced body. Eating wrong foods, thinking wrong thoughts, insufficient sleep, and other lifestyle problems, disturb the balance in the body and invite disease.

MASSAGE AND AROMATHERAPY

Massage and bodywork seek to heal the body by releasing blocked energy, much like acupuncture, acupressure, and chiropractic. The benefits of massage are seen in improved sleep, relief from depression, anxiety and fatigue, reduced output of stress hormones, and greater vigour. If possible, use a scented oil / bath oil like lemon, camomile, lavender or sandalwood, to take advantage of the purported benefits of aromatherapy. Get into hot water; turn off the glaring lights and use candlelight around the bathtub; nibble on 1.5 gm of dark chocolate which is known to be a mood enhancer; or savour fresh grapes, orange slices or other fruits which not only supply valuable nutrients but also help to replenish lost fluids due to perspiring in the hot bath; turn on some soothing music; get a backrub or give yourself a foot massage; dry off with a soft towel and slip into something soothing to sustain the sense of relaxation for just a little longer.

MEDITATION

Meditation cleanses, heals and calms. Today, there is absolutely no doubt about the importance of meditation in the modern healing arts and self-care. It is beneficial in post-operative recovery and stress reduction programmes. It can be used to strengthen the immune system in cancer patients. The mystical and magical power of chanting 'Aum' permeates all states of human existence. It heals and soothes. In the words of Mani Shankar, "The Aum first removes all the dirt and grime that has accumulated in our minds over the years. If there are unhealed wounds from the past, they too get healed. People who have flowed with this beautiful mystical word become good at forgiving; good at saying sorry."

MUSIC THERAPY

Music permeates into our being effortlessly. "Omkar' is the origin of Indian music. We receive many benefits by listening to different types of music. It relaxes the mind and calms fears. Dr. Balchandra Fadnavis, practising surgeon in Mumbai for over 27 years, says that playing music during surgery has shown amazing results. It was found that patients required less anaesthesia when music was played, recovery time was shortened and pain was less. Music is the language of the soul which is why it is helpful in meditation and stress reduction.

NATUROPATHY

Naturopathy teaches that every cell of the body needs the same three factors for life and health:

- Co-ordination within a single cell, which is controlled by chemical means, and co-ordination throughout the entire body by means of hormonal and nervous systems. If this co-ordination is disturbed, a state of ill health results
- Adequate drainageto rid the body of toxic end products of metabolism
- Nutritionin the form of the right balance of proteins, carbohydrates and fats; and vitamins, minerals and essential fatty acids

Naturopathy's greatest benefit is the strengthening of the immune system for greater resistance to disease.

TRADITIONAL CHINESE MEDICINE

With its emphasis on diet, exercise and herbal therapies, traditional Chinese medicine can be compared, in principle, to ayurvedic medicine, western nutritional regimes and naturopathy.

VISUALIZATION

Visualization and imagery have been useful in helping cancer patients by creating a positive mental and emotional state in which the immune system can function at its most effective. (For more details, refer 'Getting Well Again' by Drs. Carl and Stephanie Simonton).

YOGA

The word Yoga has its origin in the Sanskrit word 'yuj' which means 'to unite'. It symbolizes the unity of the body, mind and the consciousness. This ancient science has been around for over 5000 years and is mentioned in many ancient Indian scriptures. This simple yet amazing form of exercise and meditation gently teaches and coaxes the various benefits brought about by yoga in coping with breast cancer or any other form of illness or disharmony in the body. It is holistic and a complete way of living. Through the regular practice of yogic asanas, techniques and philosophy, one can attain clarity of thought which then brings about a heightened awareness. Yoga aims at promoting mental and physical well being through healthy development and maintenance of the physical body.

Yoga also teaches that nasal breathing controls the flow of **prana**, a vital life force.

Breathing is believed to connect the mind and emotions through the

parasympathetic nervous system and reduce tension, so that negative emotions such as anger, frustration and depression can be controlled.

Another important component in Yoga is stretching. It helps people to get in touch with their bodies. Coupled with breathing, this can trigger the beneficial chemical and hormonal reactions of body relaxation response, a key tool in protecting the body against the ravages of stress.

LOVE MORE, LIVE LONGER

In conclusion, it can be said that cultivating a loving relationship with a spouse or partner is one way to increase your odds of having a healthy future. There are numerous studies that have documented the protective benefits of a good marriage and the negative effects of a marriage filled with strife or marred by indifference. It is equally important to cultivate friends whose interests and outlook on life match your own. To enrich your life further and elevate your sense of self-worth, connect with other people in your community. Social support fulfils the most basic human needs of:

- Being cared for and loved
- Being valued
- Having your personal worth confirmed

- Sharing intimacy
- Companionship, communication and a sense of belonging
- Having easy access to information, advice and guidance from others
- Material and financial assistance in times of need

NUTRITION

At PASSAGES we care...

The important role that nutrition plays in preventing disease and in facilitating healing cannot be highlighted enough.

Does what you eat matter?

Is there any cancer-preventive diet?

Is breast cancer linked to diet?

Yes, to all questions!

Adelle Davis, U.S. based Nutritionist & writer, has said, "Nutritional research, like a modern star of Bethlehem, brings hope that sickness need not be a part of life."

In the etiology of various illnesses, including cancer, the food and health debate prevails. Nutritional research has dramatically changed our way of thinking about the role of diet in the prevention and treatment of cancer. It is increasingly clear that some dietary elements may help prevent the development and spread of malignancies, while others slow or block tumour growth. Today, we know without doubt that a high-fat diet may encourage the growth of various cancers, particularly breast cancer, which is considered a lifestyle disease. Although this fact is yet unproven by major statistics, some studies indicate that a diet high in saturated fats

during adolescent years can cause breast cancer decades later. Therefore, it is worth taking a look at nutrition from a cancer-preventive point of view.

CANCER PREVENTIVE FOODS

When the body has too many free radicals, these molecular outlaws can run wild, attacking healthy tissue. The results are serious and cancer is one of them. Many physicians now recommend supplements that act as powerful anti-oxidants. Anti-oxidants prevent the oxidation of HDLs, the good unsaturated fatty acids, by trapping the free radicals that would otherwise destroy them. Destruction of these fatty acids can lead to cell damage and cancer. Some of the better known anti-oxidants are:

- Beta-carotenes
- Selenium, which works best in combination with Vitamin E (also a powerful anti-oxidant) if taken half an hour before meals.
- Vitamin C

An anti-cancer diet should support the immune system, which is the main defence against cancer.

Eat more fruit and vegetables. There is compelling data to associate a diet that provides ample fruit and vegetables with a reduced risk of many deadly cancers. These are foods rich in bioflavonoids and other plant chemicals, dietary fibre, folate and anti-oxidants from the carotenoid family, and Vitamin C. These substances may actually slow, stop or reverse the processes that lead to cancer, by:

- Neutralizing or detoxifying cancer-causing agents (carcinogens)
- Preventing precancerous changes in cellular genetic material due to carcinogens, radiation and other environmental causes
- Enducing the formation of protective enzymes
- Reducing hormonal action that can stimulate tumour growth

Folate is essential for normal DNA synthesis and repair and it is thought that low levels of folate may make cells vulnerable to carcinogenesis.

Pigments and other chemicals that give plant foods their bright colours also seem to add to their cancer-fighting properties. Nutritionists now agree with the age-old wisdom of eating at least three different coloured vegetables (dark green leafy; dark yellow, orange and red) and at least two different fruits daily. Include one serving of citrus fruit a day and cruciferous vegetables such as bok choy, broccoli, brussels sprouts, cabbage, cauliflower, kale, mustard greens and turnips.

Reduce fat intake. Several studies point to the link between a high-fat diet and obesity with an increased risk of cancers. Experts stress that no more than 30% of total kilojoules should come from fats, while many advocate a 20% limit.

Simple dietary changes to reduce the consumption of fat are:

- Eat vegetarian dishes several times a week
- If you are a non-vegetarian, choose lean cuts of meat and trim away all visible fat
- Adopt low-fat cooking methods such as steaming and baking
- Limit the use of added fats such as butter, margarine, mayonnaise and oils.

Omega 3 fatty acids, like fish oil and flax seed oil have been demonstrated to reduce the growth rate of breast tumours.

Eat more fibre. High fibre legumes and wholegrain breads are good to eat.

Break high-risk habits. Limit the intake of alcohol and consumption of processed foods, saturated fats and excess sugar; stop smoking. Nitrate cured, salt cured, smoked and charred meats should be avoided.

A qualified dietician should be part of the cancer treatment team. Surgery, and especially cancer treatments such as radiation and chemotherapy, curb the appetite and may produce nausea and other side effects. A qualified dietician will be able to devise a nutritional plan based on a variety of foods as a first line of defence or recommend supplements to provide the kilojoules.

BEST SOURCES OF PLANT CHEMICALS, FIBRE AND FOLATE:

Vitamin C:citrus fruit, strawberries, rockmelon, kiwi, mango, broccoli, brussels sprouts, cauliflower, capsicums and potatoes

Carotenoids: sweet potatoes, carrots, squash, pumpkin, broccoli, red capsicums, apricots, rockmelon, mangoes and papaya

Fibre:corn, pears, broccoli, brussels sprouts, potatoes (with skin), carrots, apples, berries, figs, prunes, peas and spinach

Folate: green leafy vegetables, spinach, orange juice, broccoli, avocado, asparagus and brussels sprouts

TOP CANCER-FIGHTING FOODS:

Apples, berries, broccoli and other cruciferous vegetables and citrus fruit contain flavonoids which act as antioxidants

Tomatoes & tomato products contain lycopene

Onions & garlic contain sulphur compounds that may stimulate the immune system's natural defences against cancer

Carrots are one of the richest dietary sources of betacarotene – a potent antioxidant that helps fight potentially harmful free radicals

Green tea contains EGCG, a catechin which some scientists believe may be one of the most powerful anti-cancer compounds ever discovered

Brazil nuts, seafood, some meats & fish, wheat bran, wheat germ, oats & brown rice are the best sources of selenium, a trace mineral that is another powerful cancer-fighter

Yoghurt contains acidophilus cultures which stimulate the body's production of gamma interferon – a chemical that can slow down the growth of tumours

Soya which is found in soya milk and tofu, contains plant chemicals called phytoestrogens which block the damaging effects of the female hormone oestrogen on breast tissue

Seaweed contains more minerals than any other plant. It is believed to stimulate the activity of our immune cells, protecting the body from disease. Scientists believe it plays an important role in explaining why women in Japan have such low rates of breast cancer

Olive Oil has monounsaturated omega-9 fatty acids which make the cells less susceptible to damage by harmful free radicals, thus suppressing the growth of breast cancer

EATING RELATED SIDE EFFECTS

Patients who are recuperating from surgery, the side effects of chemotherapy, or fatigue and malaisefollowing radiotherapy, may experience a depletion of micronutrients with a loss of energy and weight. Loss of appetite, nausea and other eating problems can be dealt with by changing daily habits and routines.

HERE ARE SOME TIPS ON EATING WHEN YOU ARE UNDERGOING TREATMENT

When you experience	What you should do
A loss of appetite	 Eat with others in a pleasant social atmosphere Get dressed to eat and make meals as visually attractive as possible Drink fluids like milkshakes and juices Eat small and frequent meals throughout the day. Keep snacks like raisins, dates, figs and apricots handy
Weight gain (do not diet during your treatment)	 Eat fruits, vegetables, breads and cereals Choose lean meats, low fat milk, low calorie cooking methods (broiling and steaming)
Nausea and vomiting	 Plan major meal for time of day when least likely to experience nausea and vomiting. Otherwise, eat small, frequent meals and snacks throughout the day Let someone else prepare the food – cooking

	 odours often provoke nausea. Food served cold or at room temperature give off less odour than hot food Try chewing on ice chips or sucking on a ginger lolly or sour lemon drop before eating. Eat foods that are easy on the stomach, such as toast, yoghurt, <i>khichdi</i>, coconut water, chicken broth Avoid spicy or fried foods. Maintain a soft diet Rest for half an hour after eating, preferably in a sitting or upright position
Diarrhoea	 Avoid fatty foods, raw fruit, wholegrain products and other foods that can make it worse Eat binding foods such as rice, bananas, cooked apples and dry toast Drink plenty of fluids that retain sodium and potassium, such as saboodana water, khichdi,light buttermilk and coconut water
Constipation	 Add more fibre to your diet by eating whole wheat breads and dried fruits Have plenty of fluids Drink herbal hot water frequently
Mouth sores	 Eat bland, pureed foods Avoid salty, spicy or acidic foods Sucking on zinc lozenges may speed the healing of mouth sores Pay attention to dental hygiene. If mouth sores hinder brushing, make a paste of baking soda and use your finger or soft cloth. Then rinse your mouth with a weak solution of hydrogen

	peroxide and baking soda. Avoid full-strength commercial mouthwashes that may make the breath feel fresh but aggravate sores • If a dry mouth makes swallowing difficult, liquefy foods in a blender or moisten them with low-fat milk, sauces or gravies
A change in taste or smell	 Eat milk-tasting foods Add flavoured seasonings such as basil, garlic, coriander, tamarind and onions Eat sour foods such as oranges and sweet lime

AND, FINALLY.....

Believe in the wisdom of your body. Experts now consider that force-feeding may actually spur tumour growth. Anorexia and cachexia (a severe form of malnutrition and body wasting) that occurs in advanced cancer may be an example of the body's wisdom as it attempts to starve the tumour, while aggressive therapy attempts to destroy it. Once this is accomplished, appetite returns and the body regains lost weight as recovery takes place.

MYTHS AND FACTS

Myth The appearance of a breast lump indicates cancer
 Fact Majority of lumps, especially in the very young, represent benign masses or cysts
 Myth Breast Cancer is a dangerous disease in all

Fact There is extreme diversity in the behaviour of breast cancer

Myth A woman with no family history is not at risk

Fact Over 75% of all patients with breast cancer have no family history

Myth Breast Cancer is a disease of elderly women

Fact An increasing number of patients present early, in second and third decades

Myth Women with large breasts are at a higher risk of having breast cancer

Fact Risk is not related to breast size

Myth Breast feeding prevents breast cancer

Fact Breast cancer strikes many women who have breast fed normally

Myth Estrogens cause breast cancer

Fact Estrogens only minimally enhance risk

Myth The earliest sign of breast cancer is a lump

Fact Breast cancer frequently exists in the absence of a lump. Majority of cancers detected by mammography are not felt, and early treatment at this stage provides best outcomes

Myth A malignant breast lump is always painless

Fact Basically true. However, occasionally there are unusual sensations like soreness or burning

- Myth A 'negative' mammogram rules out breast cancer
- Fact In women with dense breasts, mammograms are NOT useful. Certain types of cancer do not show up on mammography
- Myth A 'negative' FNAC from a breast lump rules out cancer
- Fact A negative FNAC cannot rule out cancer. 'Triple' assessment is essential, i.e. Clinical, Imaging, and Biopsy; ideally, ultrasound-guided core biopsy
- Myth Mastectomy is 'safer' than lumpectomy
- Fact Mastectomy and Breast Conservation have identical survival results
- Myth Mastectomy is the most important treatment for breast cancer
- Fact Breast cancer is today managed by a multi-disciplinary team
- Myth Once the lymph nodes are removed, the affected arm will swell
- **Fact** With proper attention, care and exercise, the swelling is usually not severe or common
- Myth Chemotherapy is reserved for advanced cases only
- **Fact** The need for chemotherapy is evaluated by assessing risk by a number of tests. Even a patient with a very early cancer could need chemotherapy
- Myth Radiation therapy burns and destroys the skin of the breast
- Fact Skin changes are similar to sunburn and are temporary
- Myth Women receiving radiation should be kept away from family members due to concerns about radioactivity
- Fact The x-rays do not stay in the body and there is no danger in physical contact

- Myth One should be stoic about the disease and not place the burden of decision making on the family
- Fact Breast cancer affects the entire family. Be honest and open about your fears and concerns so that the family and all its members can draw on each other for strength and support
- Myth After treatment for breast cancer, a woman cannot and should not plan a pregnancy
- Fact Women who have completed treatment and are free of cancer can plan a pregnancy
- Myth All individuals with a known family history are 'at risk'
- Fact 'Risk' is determined by a detailed family history and varies considerably

WHISPERS OF COURAGE & HOPE

Inspiring words that demonstrate the grit, determination and faith of many patients who 'believe' and seek to share with others.....

"Treat your cancer as but one of the things to be managed in the regular flow of life. Continue with your work, exercise, leisure as usual. Make sure that the cancer does not 'fill' your mind space, leaving little room for other thoughts and activities. Make sure you involve your mind and body in other activities."

- A patient

"When everything was darkness and despair, I turned on the lantern of hope and flooded my life with light; and faith is the staircase that leads to hope."

- Niloufer H. Rozario

"If my good days did not last forever, why should I believe that these troubled times will."

- A patient, TMH

"I'm quite sure that whatever people go through, although everybody uses this experience differently, if you choose to use it positively you can be a winner."

- A patient's response in the ongoing research by Alison Macdonald

"Oh, I forgot I had cancer!"

- Manish, 29 years of age, when asked to share his experience at a SupportGroup held by PASSAGES

"I do believe that my cancer set me free. It sent me on a path of discovery and prayer more than anything else."

- A patient's response in the ongoing research by Alison Macdonald

"Whilst I've been working with the charitable organisations in Mumbai, I have been humbled and inspired by the timeless and selfless work of these volunteers for cancer patients. The volunteers are dedicated to raising awareness and wholly committed to spreading the message of early detection of cancer as well as providing utmost care, love and support to those women in their difficult times of need. I am proud to be associated with these organisations and their noble cause."

- Alison Macdonald, a Ph.D. student from the UK

"You need to trust and heed your chosen doctor. There are many, many sources of unwanted and confusing information, such as the internet, unsolicited advice from friends, family and well-wishers. Learn to stay away from excess and unproductive information hunger."

- A patient

"CANCER was the ENHANCER of qualities I never knew I possessed. So now, the 'why me?' has changed to 'Thank you, God, for the change'."

- Indu Nair

"The difficult and selfless work you carry out, silently and tirelessly, is being recorded in the Book of Life. To caregivers all over the world, I salute you."

- Coomi B Singh

"I realised that 'this too shall pass'. I saw the doctor's waiting room as a meeting place for new friends. My Labrador pup was the most loving, delightful and exasperating distraction."

- Nivedita Sinha

"The importance of a surgeon's skill cannot be denied. But, if you have a skilled surgeon who is kind, understanding, compassionate and with a touch of humour, your chances of recovery improve greatly. Mine was such a one!"

- Niloufer H. Rozario

"I realise the joy of re-discovering myself and the joy of being alive. I may go to sleep at night thinking I don't know what tomorrow will be like, but then I wake up to the feeling: Hey! Here is another day. I have hope and strength, so let me give it my best.

- A patient's response in the ongoing research by Alison Macdonald

"My illness made me a better person. It taught me that life is precious, fragile and to be treasured; not wasted away in trivial pleasures."

- A patient

"There is always some good that comes out of every experience. I lost my sister-in-law to cancer. But I learned that there are many who can recover and much that needs to be done to help them."

- A relative

"In my case, my own children were HELPLINE and REHAB CENTRES for me."

- Gulab Pohumal Khubchandani

"I have seen the physically frail bodies of women who cope with their illness, fight back with hope, determination and courage of the highest kind, simply because they have a strong reason to live for; usually, someone to live for."

- Coomi B. Singh, a caregiver

SUPPORT GROUPS

A list of member groups of the apex body **Cancer Care India** based at New Delhi. W: www.**cancercareindia.net**

AHMEDABAD

Karuna Kare Foundation, B-705, Ganesh Plaza, (Opp. Navarangpura Bus Stop), Ahmedabad 380009

E: karunakarefoundation@canceraid.org

W: www.ccanceraid.org

CHANDIGARH

Sahayta Charitable Welfare Society, 1220, Sector 18-C, Chandigarh 160 022

E: sahayta@satyam.net.in

W: www.sahayta.org, www.cancersahayta.com

CHATTISGARH

Sankalp, 47, Nehru Nagar, Bhilai 490 020, Chattisgarh

T:+91 78 82440490

CHENNAI

Can Stop, Dr. V. B. Rangarajan Memorial Hospital, Shanti Colony, 4th Avenue, Annanagar (W), Chennai 600 040

T: +91 44 26268844E: canstop@smthospital.org W: www.smthospital.org

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E: jeevodaya@vsnl.com W: www.jeevodaya.com

Laxmi Pain & Palliative Care Clinic, 136 Poonamallee High Road, Chennai 600 084

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T: 0361 2417476

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Laryngectomee Club, CCWH & RI, Mahatma Gandhi Road, Thakurpur, Kolkata 700 063

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Saktipada Das Memorial Foundation, AJ 321, Salt Lake City, Kolkata 700 091

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Can Support, Kanak Durga Basti Vikash Kendra, Sector 12, R. K. Puram, New Delhi 110 066

T: +91 11 2610 2851 / 2859 / 2869

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Jodharam Memorial Cancer Society, C/o Hind Electronics Industries, 69/9 Najafgarh Road, Motinagar, Opposite Indian Oxygen, New Delhi 110 015

Tel: +91 11 2593 3682

Laryngectomee Club of India, F-11 (G8 Area), Near Harinagar Clock Tower, New Delhi 110 064

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ROKO Cancer Charitable Trust, B-43, Soami Nagar (South), Panchsheel, New Delhi 110 017

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At PASSAGES we care...