Hemalata Bulletin

Issue II, July 2009

Chairman's Message

Cancer care of the highest standard continues to be the focus of Hemalata Hospitals and Research Centre. We have successfully completed treating 1000 patients with our precise Linear Accelerator. We have been able to treat these patients in Bhubaneswar who would have otherwise traveled thousands of miles to get access to this treatment. The team of dedicated experts in our Radiotherapy Department deserves a special pat on their back for achieving this success.

Hemalata Hospital is continuously striving to increase the quality of cancer care by organizing CMEs and Cancer Detection Camps. We are committed to make Orissa cancer free.

Dr A.K.Rath
Chairman and Managing Director

Hemalata Hospitals & Research Centre, Bhubaneswar has successfully treated 1000 cancer cases with Conformal Radiotherapy with its **Precise Digital Linear Accelerator**. We are proud of the Radiotherapy team of our Hospital & congratulate them on this achievement.

Cancer Detection Camp held at Balasore

CME at MCL, Talcher

Cancer Detection Camp held at Rayagada

HEMALATA HOSPITALS & RESEARCH CENTRE

Multi Specialty Hospital For Cancer & Neurosciences

Breast Conservation Surgery for Breast Cancer

Dr. Ranjan Mohanty
Consultant, Surgical Oncology
Hemalata Hospitals and Research centre

In the Indian scenario the news of cancer and that to mastectomy for cancer of the breast is a difficult treatment to accept forcing a woman to hide her disease until it has reached advanced stage. Now its time to inform and educate our Indian women that breast can be conserved even in cancer and a normal life can be led.

Surgical management of breast cancer has changed significantly in recent years. The preferred method of treatment for most women with early breast cancer is conservation surgical therapy which includes a wide excision of the breast lump with or without plastic reconstruction and axillary dissection which has to be followed by radiotherapy to the remaining breast and chemotherapy and hormone therapy when indicated. Public education and screening programs have contributed to the early detection of small tumors in a greater percentage of women. Studies have shown that women diagnosed at early stages of invasive breast cancer have similar outcomes when they are treated by lumpectomy and radiation therapy or modified radical mastectomy (1,2,3). This technique allows women with different forms of breast cancer to conserve their breasts. But this can only be offered in earlier stages of the disease. Early detection is possible only when women understand the significance of breast self examination and clinical breast examination and the importance of coming to the doctor early, taking the complete treatment and coming for regular follow up.

Post MRM Post BCT

Screening and Diagnosis

Breast self examination and yearly clinical examination of all women above 35 can detect almost all breast cancers.(4) The investigation for a breast mass begins with assessment of risk based on family history, personal history of breast problems and physical examination. Significant signs of cancer include an irregular hard mass, bloody nipple discharge, lymph node involvement and skin changes. If none of these signs are present and the mass is asymptomatic, mammography (ultrasound for women 30 years of age or less) and needle biopsy should be performed.(4)

Breast Conservation Surgery (BCS)

Conservation breast surgery is possible in early breast cancers (Stage I and Stage II) that are small not involving the skin or muscle, if lymph nodes are involved, they are not fixed to each other or to underlying structures. Some tumors which are locally advanced can be down staged by giving neo -adjuvant chemotherapy followed by a breast conservation surgery. Modified radical mastectomy continues to be appropriate for some patients, but breast conservation therapy is now regarded as the optimal treatment for most. Six prospective randomized trials have shown no difference in survival when mastectomy is compared with conservation surgery plus radiation therapy for Stage I and Stage II breast cancer.

Table 1 (5)

Survival Rates of Conservation Surgery Plus Radiation Therapy Compared with Mastectomy Alone

TABLE 1

		Overall survival (%)		
Trial	Endpoint(yrs)	CS	RM/Mast-ectomy	(P value)
Milan Cancer Institute Trial (n = 701)	18	65	65	(NS)
Institut Gustave-Roussy (n = 179)	15	73	65	(.19)
NSABP B-06 (n = 1,843)	12	63	59	(.12)
National Cancer Institute (n = 237)	10	77	75	(.89)
EORTC (n = 903)	8	54	61	NS
Danish Breast Cancer Group (n = 905)	6	79	82	NS

CS - conservation surgery, RM - radical mastectomy

Choosing the right patient

Choosing the right treatment for the right patient is very important. A complete history and physical examination has to be taken to determine which surgery is best for each individual patient. A family history of breast cancer is not a contraindication to breast conservation surgery. Age alone should not be a determining factor in selecting surgical strategy, however elderly women may have co-morbid conditions that need to be considered. A woman who might refuse a re-excision or a mastectomy if margins come positive or has difficulty complying with six weeks of radiation treatments may be a better candidate for mastectomy.

The patient's wishes should always be considered when deciding treatment. For most patients, mastectomy will not influence the likelihood of survival but may have impact on the quality of life. Women whose breasts are preserved have fewer episodes of depression, anxiety, and insomnia A recent study of patients with early-stage breast cancer found women who undergo breast conservation therapy have improved body image, higher satisfaction with treatment and no more fear of recurrence compared with women treated with mastectomy

Contraindications of Conservation Surgery

ABSOLUTE

1) Multiple primary tumors located in different quadrants of the breast or associated diffuse micro-calcifications in the mammography which appear malignant,

2) A woman with history of previous irradiation is also not a candidate. Breast irradiation should not be given during pregnancy but it may be possible to perform breast conservation surgery in the third trimester and administer irradiation after delivery.

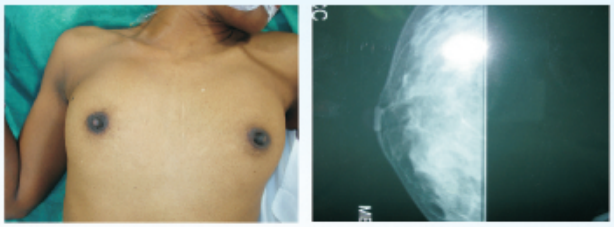
RELATIVE

1) For a radiation oncologist a history of collagen vascular disease is a relative contraindication because the poor vasculature in the skin leads to unacceptable cosmetic results.

2) Tumor size is not an absolute contraindication, but the presence of a large tumor in a small breast treated with adequate margins might result in an unwanted cosmetic appearance.

Surgical Techniques

Wide excision of the tumor with minimum 1cm of healthy margin all around the tumor reaching up to and removing the pectoral fascia below and adjacent to the tumor is essential to prevent margin positivity and recurrences. This may be achieved with a suitable incision achieving good cosmesis and including the scar in the radiation field avoiding incisions nearer to the sternum. The surgical bed may be marked with clips for the radiation oncologist to identify the tumor bed during radiation planning. The incision is closed without trying to obliterate the cavity or a drain which may produce a deficit in the operated area.



Photograph and mammography of our patient with upper inner quadrant tumor right breast

Same patient after Breast conservation surgery

The axillary dissection is performed with a transverse incision at the lower border of the axilla and extends anteriorly to the posterior border of the pectoralis major muscle. In a standard axillary dissection Level I and Level II nodes are removed. Removal of Level III axillary nodes is necessary when obvious disease is present. A closed suction drain is placed following axillary dissection. Wound is closed without tension to avoid margin necrosis and delay in wound healing there by delaying adjuvant therapy. Active range-of-motion exercises are advised beginning three to five days postoperative to prevent frozen shoulder.

Complications of Surgical Treatment

Most common complications of breast conservation surgery are seromas, bleeding and infection. Seromas (accumulations of clear serous fluid) can develop and are usually treated with percutaneous needle aspiration. Major complications after axillary dissection are rare and include lymphedema of the arm and nerve damage.

Chemotherapy

Chemotherapy has to be given in majority of the patients taking in to consideration age, size, grade of the tumor, lymph node status and receptor status of the tumor. Anthracycline based chemotherapy (Adriamycin) is the standard of care ,but addition of Taxol with Anthracycline or single agent Taxol is more effective in high risk patient like younger age, node positive status and negative receptor status.

Radiotherapy

Radiotherapy begins two to four weeks after completion of chemotherapy . The dose of radiation delivered to the entire breast is between 45 and 50 Gy. A booster dose of 15 Gy is delivered to the tumor site. Treatment is given for five days per week for a period of six weeks excluding Saturday and Sunday.

Randomized controlled trials have compared breast conservation surgery alone with surgery plus radiation therapy. These trials have shown a higher recurrence rate in women who did not receive radiation. A standard breast conservation therapy should therefore include radiation therapy.

Hormone therapy

Pts having Estrogen receptor and Progesterone receptor positive status or either of them positive get survival advantage on taking hormone therapy like Tamoxifen in pre and post menopausal lady or aromatage inhibitors like letrozole and anastrozole etc in post menopausal lady.

Those who are having HER2 neu receptor positive, they respond to trastuzumab (Herceptin), a monoclonal antibody against HER2 neu receptor and have some survival advantage.

Follow-Up

Clinical history, physical examination, and breast imaging are the most effective means of follow-up. Physical examination should be performed every three to six months for the first three years following surgery, and every six months for next two years. After five years, annual physical examination provides adequate follow-up. Patients at exceptionally high risk of recurrence or development of a second primary tumor should be watched more closely(6).

References :-

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3) Arriagada R, Le MG, Rochard F, Contesso G. Conservative treatment versus mastectomy in early breast cancer: patterns of failure with 15 years of follow-up data. Institut Gustave-Roussy Breast Cancer Group. J Clin Oncol 1996;14:1558-64.

4) (Apantaku LM. Breast cancer diagnosis and screening. Am Fam Physician 2000;62:596-602.)

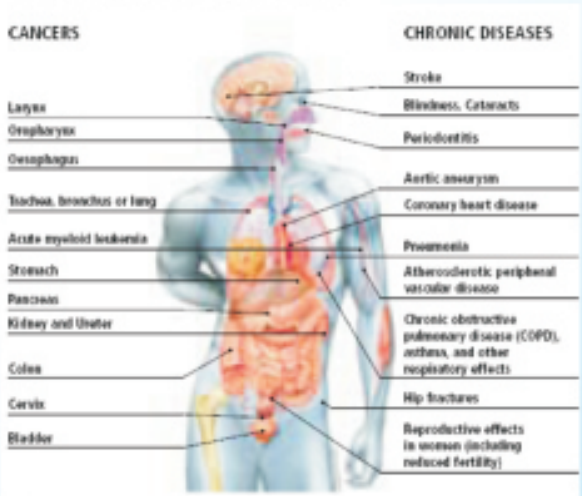
5) Winchester DP, Cox JD. Standards for diagnosis and management of invasive breast carcinoma. CA Cancer J Clin 1998;48:83-107.

6) (Am Fam Physician 2002;66:2271-8,2281. Copyright© 2002 American Academy of Family Physicians.)

HEMALATA HOSPITAL OBSERVES WORLD NO TOBACCO DAY ON 31st MAY 2009

Hemalata Hospitals and Research Centre, Bhubaneswar in association with IMA Bhubaneswar branch observed World No Tobacco Day on 31 May 2009. On this occasion eminent epidemiologist and anti tobacco activist **Dr. Prakash C Gupta**, Director, Healis-Sekhsaria Institute for Public Health, Mumbai delivered a Lecture on TOBACCO & HEALTH . Office bearers and members of IMA Bhubaneswar Branch participated.

DISEASES CAUSED BY SMOKING



SOURCE : WHO REPORT ON THE GLOBAL TOBACCO EPIDEMIC, 2008

About half of the male and one third of the female cancer patients in Eastern India suffer from Oral cancers. These cancers can be prevented and are usually associated with tobacco habits. As prevention is better than cure, we are equally committed to educate the people about the ill effects of Tobacco. Early diagnosis is the best way to treat cancer. Free cancer detection camps are conducted regularly and cancer awareness programmes are held at regular intervals at various parts of the state by our hospital.

As per the initiatives of World Health Organisation (WHO), every year 31 May is observed as WORLD NO TOBACCO DAY. It has been three years in a row Hemalata Hospital has been observing this day. This year we conducted a free Oral Health Checkup and free Cancer Detection Camp on 30 and 31st May 2009.

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