

Establishing a Multidisciplinary Breast Unit in a Middle Income Country – Challenges and Successes

CH Yip MBBS FRCS¹, Nur Aishah Taib, MBBS, MS, MRCSEd², Alfiah Amiruddin MBBS, MS³

¹ Professor Dept of Surgery, University Malaya Medical Center, Kuala Lumpur, ² Associate Professor, Dept of Surgery, University Malay Medical Center, Kuala Lumpur, ³ Breast Surgery Fellow, Dept of Surgery University Malaya Medical Centre

ABSTRACT

The Breast Unit in the University Malaya Medical Centre (UMMC) was set up in 1993 to cater for the increasing number of women presenting with breast complaints. The surgeon plays a central role in the coordination of the multidisciplinary team which consists of the breast surgeon, pathologist, radiologist, oncologist, plastic surgeon, physiotherapist, psychooncologist, as well as the specialist breast care nurse. The unit provides a comprehensive patient care programme, with diagnostic services (triple assessment comprising clinical evaluation, radiological assessment and biopsy), breast screening services (clinical breast examination and mammography / adjunct ultrasound), oncological services and palliative care services. Throughout the course of the treatment and post-treatment, emphasis is placed on supportive and emotional care of the patient and her relatives. Teaching and training of undergraduate and postgraduate students form part of the functions of this unit, and clinical and basic research is actively carried out. It has been shown that patients treated in a multidisciplinary breast unit have a better overall outcome: however in low and middle income countries, the development of such units are hampered but lack of manpower and resources. In UMMC, with the institution of treatment protocols and guidelines, it is hoped that survival of patients treated in this multidisciplinary unit will progressively improve.

Key words : breast cancer, multidisciplinary breast unit, comprehensive breast care

INTRODUCTION

There are many international reports that patients treated in a Breast Unit have a better overall outcome^{1,2} In a Breast Unit, although the primary care of breast cancer is the responsibility of surgeons, overall management also involves radiologists, pathologists, oncologists (radiation and medical), plastic surgeons, physiotherapist, psychooncologists, counselors and specialist breast care nurses, that is, a multidisciplinary team approach.³ The surgeon plays a central role—both in the UMMC) was set up in 1993,⁴ and over the next 15 years, has developed gradually, until the present time when it is now considered a centre of excellence for management of breast diseases locally and accepts referrals from all over Malaysia.

GUIDELINES FOR MANAGEMENT OF BREAST CANCER

In any breast unit, it is important that guidelines are established for the comprehensive management of breast cancer, whether institutional or national-based. The Ministry of Health and the Academy of Medicine in Malaysia launched the National Clinical Practice

Guidelines for the Management of Breast Cancer in November 2002. (<http://www.moh.gov.my/MohPortal/cpgPublic.jsp>). The objective of this guideline is “to present evidence based recommendations to assist the health care professional in clinical decision making by providing well balanced information on how to arrive at a diagnosis of cancer without undue delay, achieve both local and systematic control of disease by a multidisciplinary approach with reduction of the risk of recurrence to improve survival and maintain a good quality of life for the patient.” The importance of the multidisciplinary approach is also emphasized in these guidelines.

FUNCTIONS OF THE BREAST UNIT, UNIVERSITY MALAYA MEDICAL CENTRE

The Breast Unit in the UMMC serves the following functions

1. Patient Services

From one clinic session and a half-day operating session per week in 1993, the unit has expanded to three clinic sessions per week, one breast cancer combined

ALAMAT KORESPONDENSI

CH Yip MBBS FRCS

Department of Surgery University Malaya Center Kuala Lumpur

E-mail : yipch@un.edu.my

clinic with oncology, per week, and a weekly full-day operating list as well as a weekly daycare list. The unit currently sees over 200 patients per week in the clinics.

a. Diagnostic Services

The triple assessment, comprising clinical assessment, radiological assessment by mammogram or/and ultrasound followed by biopsy (fine needle or core-needle) is practised to confirm a diagnosis of cancer. The breast clinic is a one-stop clinic where these three assessments are done on the same day. Diagnostic services are provided by a multidisciplinary team of surgeon, radiologist and cytopathologist / histopathologist. With a multidisciplinary approach, the aim is to confirm or exclude a diagnosis of breast cancer within the shortest possible time.

Communication between the radiologist, surgeon and pathologist is of the utmost importance so that cancers are not missed. The Radiology Department is well-equipped with modern digital mammography and ultrasound facilities, and has the facilities to carry out stereotactic biopsies, ultra-sound guided biopsies, and also offers mamotomy services.

The cytopathologist is present at the breast clinic to carry out the fine needle biopsy under microscope control to ensure that sampling is adequate. The sensitivity of fine needle biopsy in this unit is 91.7%.⁵

b. Screening Services

Besides symptomatic patients, the breast unit also offers breast screening. Patients for screening are divided into standard risk (where screening mammography is offered every 2 years above the age of 40 years old) and high risk (eg family history, hormone replacement therapy, previous biopsy showing atypical ductal hyperplasia) where screening mammography is offered every year.

c. Surgical Services

The Breast Unit carries out the whole range of breast surgery from excision of fibroadenomata to modified radical mastectomy. For women undergoing mastectomy, especially if they are young or psychologically unable to accept the loss of a breast, immediate reconstruction is offered, and the patients are referred to the plastic surgeon, and the surgery planned for the breast surgeon to do the mastectomy and then the plastic surgeon to reconstruct the breast. Various options of reconstruction is explained to the patient.

d. Oncology Services

After the surgery for breast cancer, the patients are seen in the Breast Cancer Combined Clinic, which is run by the surgeons and the oncologists, where the histology report is reviewed and the adjuvant therapy planned. Adjuvant therapy in the form of chemotherapy, radiotherapy and hormonal therapy is discussed with the patient.

e. Palliative Care

For patients with metastatic breast cancer which is not curable, a 6-bedded palliative care corner was set

up in the surgical unit in 2003 to cater for patients requiring symptom control. The unit works closely with a non-governmental charity, the Hospis Malaysia, which provides community palliative care for the patients when they are discharged.

f. Counseling, Support and Rehabilitation

Although the breast unit started in 1993, it was not until 2003, that the post of a breast care nurse was established. The role of the breast care nurse is to counsel the patient and her relatives when she is diagnosed with breast cancer, discuss the treatment options, what she will experience in the ward, and also to take care of the wound post-operatively. The Breast Cancer Resource Centre, donated by Avon, was opened in December 2005, and has facilities such as Internet, books and videos for patients with breast cancer. Since 1993, volunteers from the Breast Cancer Welfare Association, who are breast cancer survivors, offer expert peer support to the patients. In Aug 2006, Avon donated RM100 000 to set up the Breast Prosthesis Fund, which has been used to pay for prostheses for women who are unable to afford the prostheses.

MULTIDISCIPLINARY MEETINGS / CLINICS

A weekly multidisciplinary Breast Combined Meeting (BCM) is held in the Pathology Department, where the mammogram/ultrasound, clinical assessment and the biopsy results for the patients seen the previous week is discussed. Any discordance between these three assessments is reviewed and a decision made as to whether an urgent open biopsy is required. At this meeting, the pathology report of patients operated for breast cancer 2 weeks before are discussed and a decision on adjuvant therapy made. These reports will be made available at the patients' next clinic appointments either in the Breast Clinic or in the Breast Cancer Combined Clinic in the Oncology Unit.

2. Teaching and Training

The Breast Unit also plays an important part in the teaching of undergraduate medical students, who are taught the basic triple assessment approach to the diagnosis of breast cancer. They are given the opportunity to examine the patients, review the mammograms and to observe how fine needle biopsy is carried out.

Students in the post-graduate Master of Surgery programme are posted to the Breast Unit for 2-3 months, where they run the clinics, operate under supervision and also learn the basics of chemotherapy and radiotherapy in breast cancer. They also learn palliative care during their posting, and the art of communication, team work and breaking bad news.

The unit also offers post-Masters fellowship programme for breast surgery and currently has a breast surgery fellow from Indonesia.

3. Research

Being a big unit with over 300 new cases of breast cancer diagnosed each year, the breast unit provides ample research opportunities. A breast cancer database has been kept since the Breast Unit started in 1993, and now has over 3000 cases of breast cancer where information on age, race, sex, stage

and other pathological factors are available. With this database, survival data is currently being evaluated with information on mortality obtained from the National Dept of Registration and Deaths.⁶

Besides clinical research, basic research is important, and this unit has a research project with the Cancer Research Initiatives Foundation to study the genetic mutations of breast cancer in the Malaysian population.^{7,8}

CHALLENGES AND FUTURE DIRECTIONS

1. Manpower Shortages

Currently the unit has only 2 surgeons and one breast care nurse, working with specialists in other areas, such as the pathologist, oncologist, radiologist, psychiatrist, and plastic surgeon. There is a shortage of staff in all the essential areas required for an efficient and effective breast care programme. Added to this problem, the current specialists have to cover other areas, and are not totally dedicated to breast care alone.

The unit also requires a dedicated clerical team to be able to keep track of appointments for the clinic as well as for surgery. Because of the volume of cases, there is a fear that cancers may be missed or appointments are delayed. There has to be a good triage system where walk-ins are accepted depending on the urgency of the case.

2. Clinics

Currently there are three clinic sessions a week, and the new cases, follow-up cases, cases on routine screening are all seen in these three clinics. The future direction is to divide the clinics into the following clinics:

1. Diagnostic Clinic (New cases)
2. Follow-up Clinic
3. Breast Screening Clinic
4. Risk Assessment Clinic (Family history clinic)

CONCLUSION

The Breast Unit offers a comprehensive breast programme, which will take care of the patient from

diagnosis, through treatment and rehabilitation and if recurrence occurs, to further treatment and finally palliative care. Throughout the course of the treatment and post-treatment, emphasis is placed on supportive and emotional care of the patient and her relatives.

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