LOCALLY ADVANCED BREAST CARCINOMA.
Does it still exist, and is there a chance for improving quality of life?

Mahmoud F. Reda
General Surgery Department, Misr University for Science and Technology.

Abstract:
In the period from 2003 till 2006 six cases of advanced breast cancer (stage 3 and 4) presented with uncontrollable local symptoms. This was in the form of severe local pain of the breast in 3 cases, extensive bleeding from fungating lesion in one case, and malodorous ulcer in 2 cases. Metastatic workup in all cases revealed liver deposits in 2 cases, one case showed osteolytic lesion of the spine and one case with multiple lung metastasis. All patients refused other modalities of the treatment either radiotherapy or chemotherapy. After routine preoperative workup, anaesthetic consultation and explanation of the possible morbidity from such major surgery, all masses were excised without a standard safety margin till a gross apparent healthy skin was noticed (toilette mastectomy) and coverage was done. This was direct closure in 2 cases, latissimus dorsi flap in 2 cases and TRAM flap in 2 cases. Healing was uneventful in all cases with mild wound infection in 2 cases (malodorous ulcer cases). The patients reported marked improvement in local manifestations and relief of pain and bleeding. Mortality was 50% after one year of the follow up. In spite of being exposed to a rather major procedure that is expected only to relieve complications and not attacking the major pathology, yet all cases appreciated the improved quality of life with no affection on their expected survival.

Key words: breast cancer-reconstruction-survival.
Introduction:

Over the past few years giant leaps occurred in the early detection of breast malignancy. This was through media campaigns, screening mammography\(^1\) and improved women awareness with self examination and medical checkups for any suspicious lesions\(^2\). This ultimately led to more conservative approaches for the management of early malignancy of the breast. This was in the form of conservative breast surgery\(^3,4\).

In accordance with this development in excision, reconstruction after more extensive procedures gave these patients a more natural looking and feeling breasts. This had a major effect on improving the psychological impact after mastectomies, the breast being a leading organ of feminine expression\(^5\).

However, locally advanced tumors remain a major source of morbidity and mortality\(^6\). Every once in a while surgical service is confronted with perplexing conditions of locally advanced breast malignancies. These patients present as a challenge as they have the hope of improved survival quality in spite of late presentation\(^7\).

Radical surgical excision in locally advanced breast cancer patients produces large defects that may not be suitable for primary closure. The primary aim in such cases is to achieve an adequate soft tissue cover expeditiously. Various methods, including skin graft, random flaps, and myocutaneous (MC) flaps, have been tried in the past. However, there is no consensus regarding the method of choice in such patients\(^8\).

The aim of this study is to shed some light on the management of these terminal cases, the modes of reconstruction, the outcome and the impact on the quality of life of those miserable women.
Patients and methods:

This study was conducted at Misr University for Science and technology from the period from May 2004 till February 2006 on 6 cases whose ages ranged between 50 and 64 with mean of 56. These cases had locally advanced breast carcinoma, 4 cases presented with this late presentation as they refused the management at earlier stage of the disease, 2 cases as phylloides tumour who neglected surgery on the assumption of being benign. They were complaining of extensive bleeding from fungating lesion in one case, and malodorous ulcer in 2 cases involving about 2/3 of the breast with fixity to the underlying structure. Three cases presented with continuous severe local pain from masses of their breast not responding to common analgesics (Table 1). All patients refused other modalities of the treatment either radiotherapy or chemotherapy.

Prior to surgery those patients with ulcerating lesions were dressed twice daily for 5 days with antiseptic solution and were given intravenous antibiotics. In the case that was presented with bleeding, packing was done and repeated blood transfusion was given before she underwent emergency surgery. Routine laboratory investigations were done as well as anaesthesiology consultation to assess their fitness for undergoing this major surgery.

Metastatic workup was done and showed the presence of liver deposits in two cases, one case with multiple lung metastasis and one case with osteolytic lesions at her spine. Finally every patient was given a detailed explanation of the goal of surgery, the expected outcome and possible morbidity.
**Operative technique:**
Under general anaesthesia, complete excision of the masses was performed without safety margins but till a gross apparent healthy skin was noticed (toilet mastectomy). Mobilization of the flaps was made and after proper haemostasis, the residual defect was assessed for the appropriate mode of coverage. In two cases it was possible to close the defects directly without tension on the suture line. Latissimus dorsi myocutaneous flap\(^9\) was utilized in the other two cases after assessing the patency of subscapular vessels. In the remaining two cases pedicle transverse rectus abdominis myocutaneous flap (TRAM)\(^{10}\) was used for coverage.

After surgery all cases spent the first postoperative night in the ICU for close assessment.

**Results:**
Table (1) shows different presentations, mode of coverage and stage of their disease.

<table>
<thead>
<tr>
<th>Cases</th>
<th>Presentation</th>
<th>coverage</th>
<th>Stage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Bleeding (Fig.1)</td>
<td>TRAM (Figure 1a)</td>
<td>IV</td>
</tr>
<tr>
<td>2</td>
<td>Big mass (Fig.2)</td>
<td>Latissimus dorsi flap (Fig.2a)</td>
<td>IV</td>
</tr>
<tr>
<td>3</td>
<td>Ulcerating mass (Fig.3)</td>
<td>Direct closure (Fig.3a)</td>
<td>III(_b)</td>
</tr>
<tr>
<td>4</td>
<td>Big mass</td>
<td>Direct closure</td>
<td>IV</td>
</tr>
<tr>
<td>5</td>
<td>Big mass</td>
<td>Latissimus dorsi flap</td>
<td>III(_b)</td>
</tr>
<tr>
<td>6</td>
<td>Ulcerating mass</td>
<td>TRAM</td>
<td>IV</td>
</tr>
</tbody>
</table>

All cases showed uneventful early postoperative period except one case with bleeding who died on the 5\(^{th}\) postoperative day from multiple organ failure. Superficial wound infection occurred in cases which subsided by repeated dressing and appropriate antibiotics.
Table (2) shows the outcome of surgery after one year of the follow up.

<table>
<thead>
<tr>
<th>Cases</th>
<th>Outcome after one year of the follow up</th>
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<tbody>
<tr>
<td>1</td>
<td>Died on the 5\textsuperscript{th} postoperative day</td>
</tr>
<tr>
<td>2</td>
<td>Died after six months from liver cell failure</td>
</tr>
<tr>
<td>3</td>
<td>Improved quality of life</td>
</tr>
<tr>
<td>4</td>
<td>Died after eight months from pulmonary complications</td>
</tr>
<tr>
<td>5</td>
<td>Improved quality of life</td>
</tr>
<tr>
<td>6</td>
<td>Improved quality of life</td>
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</table>

Follow up for one year showed improvement of the quality of life of all the remaining 5 patients. 1 case died after 6 months from liver cell failure. The third case died after 10 months from respiratory problems. At the end of the year follow up we had three surviving cases (50% survival) (Table 2).
Discussion:

Breast cancer represents a major health problem, with more than 1,000,000 new cases deaths yearly worldwide. In the last decade, in spite of an increasing incidence, breast cancer mortality has been declining in the majority of developed countries. This is the combined result of better education and widespread screening programmes that led to diagnosis at its early stages.\textsuperscript{11}
This also has led cancer breast surgeons to speak of breast cancer as a potentially curable disease with multidisciplinary therapy approach to its management and improving the prognosis\textsuperscript{12}.

Yet, every once in a while surgical service is confronted with late presenting cases with locally advanced cases. These are either de novo cases or cases that refused earlier management. Although these cases have a dismal prognosis, yet surgeons requested to work on their present status. This is in the form of huge painful masses, eroding ulcerative lesions or massive haemorrhage from these ulcerating masses\textsuperscript{13}.

Local control of these cases is a perplexing decision as these cases are usually in a poor general condition that cannot stand major surgery. But sometimes it is the only solution with excision of the swelling which does not aim at radicality but for palliation. Reconstruction is another problem where the issue is coverage of a raw area where prosthesis was never considered the armamentarium of reconstruction\textsuperscript{7, 14, 15}.

In this study tumours were completely excised without a safety margin but till a gross apparent healthy skin was noticed (toilet mastectomy) and reconstruction was done according to the size of the defect and the nearest possible flap. The one year mortality was 50\% with patients dying from distal metastasis not local disease. They all reported improved quality of life in the post-operative phase.

In conclusion, locally advanced breast tumor, curettage operations represent the only possibility to improve the quality of life and patients should not be denied major surgery to excise and reconstruct their breasts. These should be performed after carefully evaluating a series of variables in the general and local condition of the patient, the aggressiveness of the intervention and the life expectancy. Although this has no effect on
survival, and they must be given the chance to live symptom free for the ir remaining days

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