

# Selection of impalpable breast cancer for conservative surgery

Egon Svastics,<sup>1</sup> Zoltán Péntek,<sup>2</sup> Erika Szerjén<sup>3</sup>

<sup>1</sup>General & Thoracic Surgery, Railways Hospital Buda, Budapest, <sup>2</sup>MaMMa Klinika, Breast Screening Unit, Budapest, <sup>3</sup>Pathological Dept., Szt. János Hospital, Budapest, Hungary

*Breast sparing surgical interventions have been accepted worldwide in early symptomatic cancer cases. They should be applied especially in the case of mammographically screened impalpable, invasive or noninvasive cancer. The dilemma is as follows: (1.) total axillary block-dissection or lower dissection or sampling of lymph nodes, (2.) how wide the tumor "ball" should be removed, and (3.) which types of ductal carcinoma in-situ (DCIS) should be handled with special attention, and when total mastectomy should be carried out. Thanks to the efficient mammographic screening, in most of our patients breast conserving operations can be carried out. We are planning to introduce the Van Nuys classification for ductal carcinoma in-situ (DCIS).*

**Key words:** breast neoplasms; conservative surgery; impalpable lesions

## Introduction

Comparing the axillary lymph node status of symptomatic and screened small breast tumors, it seems to be evident that the size of the tumor is not the most important factor of aggressiveness.<sup>1</sup>

Many of the impalpable, non-screened cancers are detected by palpation of the enlarged axillary lymph nodes (i.e. occult breast cancer).<sup>3</sup>

Better awareness of the population through media, leaflets, lectures etc. has helped the early detection of breast cancer in many countries. With earlier detection conservative breast surgery can be applied in more and more cases. This is particularly true of screen-detected invasive or noninvasive cancers.<sup>4,5</sup>

## Patients and methods

Due to the newly established mammographic screening at the MaMMa Clinic in Budapest, with

their referred breast cancer patients the rate of conservative surgery at our Surgical Department reached 85%. During a 21-month period between March 1995 - December 1996, there were 8 impalpable tumors and 40 microcalcifications found among 210 breast cases.

On surgery, 8 impalpable tumors could be found by the help of accurate radiological description. The diameter of the tumors ranged from 6 to 15 mm, and all of them were ductal invasive cancers.

The microcalcifications were marked by wire localisation, and the histological findings were as follow:

|                         |    |
|-------------------------|----|
| ductal invasive cancer  | 15 |
| lobular invasive cancer | 3  |
| DCIS comedo type        | 5  |
| DCIS non-comedo type    | 8  |
| fibrocystic disease     | 4  |
| radial scar             | 2  |
| fibroadenoma            | 2  |
| adenomyoepithelioma     | 1  |

## Discussion and conclusions

As frozen section histology is not always able to determine the real features of the lesion, in certain

Correspondence to: Dr. Egon Svastics, Budai MAV Hospital, Department of Surgery, Szanatorium u. 2/a, 1528 Budapest, Hungary.

cases a second intervention is necessary for the definitive treatment.<sup>6,7</sup> This was the case in two large comedo type DCIS. Adenectomy or mastectomy and immediate reconstruction should be considered as a second intervention.

**Table 1.** Axillary lymph node positivity in screened and symptomatic breast cancer patients according to tumor size

|            | <sup>1</sup> Silverstein et al.<br>screening | <sup>2</sup> Natl. Oncol. Inst.<br>symptomatic | <sup>2</sup> Natl. Oncol. Inst.<br>symptomatic |
|------------|--|--|--|
| T ≤ 1 cm   | 7 %  | 15 %   | 55 %   |
| T = 1–2 cm | 15 %   | 32 %   | 47 %   |
| T > 2 cm   |  | 44 %   | 52 %   |

<sup>1</sup>Silverstein et al.<sup>2</sup>

<sup>2</sup>Unpublished data of a larger series of the National Oncological Institute, Budapest, Hungary

The relatively high number of impalpable, T<sub>1a</sub>, T<sub>1b</sub> tumors provides the reason for decreasing the radicality of axillary lymph node dissection. Only 13 % of screen-detected ≤ 1 cm tumors were found to develop axillary metastases, and 71 % of these had only 1–2 positive nodes.<sup>8</sup> The rate reported by Silverstein et al.<sup>7</sup> was even lower, i.e. 7%. Furthermore, it was stated, that in T1a tumors the frequency of axillary metastases did not exceed 3 %, thus the axillary lymph node dissection should be eliminated. The value of total axillary dissection was discredited by the NSABP B-04 trial. Looking at the increasing number of postoperative morbidity (shoulder-arm impairment, lymphedema, paresthesia, discomfort etc.) many surgeons try to decide the extent of the dissection intraoperatively. At our

surgical department if there are no macroscopically positive nodes, total blockdissection is not suggested.

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