

## CONSERVATIVE SURGERY FOR BREAST CANCER IN THE UNIVERSITY HOSPITAL FOR TUMORS

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### Summary

Surgical treatment for breast cancer remains the dominant method despite a number of minor changes in the approach. While some twenty-odd years ago, a diagnosis of breast cancer meant removal of the entire breast and beyond, today the same result (both success or fail results) can be achieved with conservative care.

Participants of the Consensus Conference in Paris in 1990 reached the conclusion that breast-conserving surgery followed by irradiation is an appropriate method of primary therapy for the majority of women with stage I and II breast cancer, and is preferable because it provides survival equivalent to mastectomy while preserving the breast.

KEY WORDS: *conservative surgery, breast cancer*

### POŠTEDNI KIRURŠKI ZAHVATI KARCINOMA DOJKE U KLINICI ZA TUMORE

#### Sažetak

Kirurško liječenje raka dojke i dalje je dominantan postupak i uz brojne manje promjene koncepta. Dok je prije dvadesetak godina dijagnoza raka dojke značila uklanjanje cijele dojke pa i više, danas je moguće s jednakim rezultatom (uspjehom i neuspjehom) liječiti rak dojke pošteđnim zahvatom.

Na Konsenzus konferenciji u Parizu 1990. godine donesen je zaključak da je pošteđni kirurški zahvat s popratnom iradijacijom odgovarajuća metoda primarne terapije u liječenju raka dojke u žena sa stadijem I i II, te se preferira u odnosu na mastektomiju zbog jednakog preživljenja.

KLJUČNE RIJEČI: *pošteđni kirurški zahvati, karcinom dojke*

### INTRODUCTION

Participants of the Consensus Conference in Paris in 1990 reached the conclusion that breast-conserving surgery followed by irradiation is an appropriate method of primary therapy for the majority of women with stage I and II breast cancer, and is preferable because it provides survival equivalent to mastectomy while preserving the breast (1).

Regarding the extension of breast conserving surgery, the options are as follows:

1. *Quadrantectomy* – is described by Veronese et al. (2). The procedure involves the removal of overlying skin, tumor and underlying fascia.
2. *Wide breast resection* – the term describes a limited surgery without the skin or pectoral fascia removal involving the excision of at least 2-3 cm of normal breast tissue. Also called: excision, tilectomy, segmental resection, wide excision.
3. *Limited breast resection* – the procedure includes the tumor removal without objective radicality. Synonyms are: lumpectomy, tumorectomy, excision biopsy (2, 3).

For conservative surgical procedure, semi-circular skin incision in the upper breast segments, radial skin incision in the lower segments and axillary evacuation through a separate cross-wise incision in the axillary region are recommended (4).

Indications for breast-conserving surgery:

1. Breast cancer less than 5 cm in diameter
2. No mammographic and US evidence of multicentricity
3. Clinically negative axilla
4. Patient's consent to breast-conserving surgery

Counterindications for conservative treatment:

1. Absolute: multicentricity, pregnancy, diffuse malignant microcalcifications, collagenoses
2. Relative: tumor size, tumor localization
3. Vague: foci on preparation margin, an extensive intraductal component, younger age <39 years (5, 6).

Conservative surgical procedures for breast cancer logically result from a biologic hypothesis for breast cancer. The value of the approach is in its good cosmetic result. Overall survival rates and disease-free intervals are identical to those of radical surgery (7-9).

## MATERIAL AND METHODS

In 2001, 137 (33%) patients underwent conservative surgery for breast cancer in the University Hospital for Tumors, Zagreb, Croatia. Preoperative evaluation, besides standard procedures, included breast US and mammography. Generally, the indication was made in tumors less than 3 cm in size. Clinical finding showed that axillary lymph nodes were negative. Skin incision was semicircular and radial in the upper and lower breast quadrants, respectively. Evacuation of axillary content was made through a separate crosswise incision in the axillary region.

## RESULTS

Conservative surgery for breast cancer was performed in 137 or 33% of all breast cancer pa-

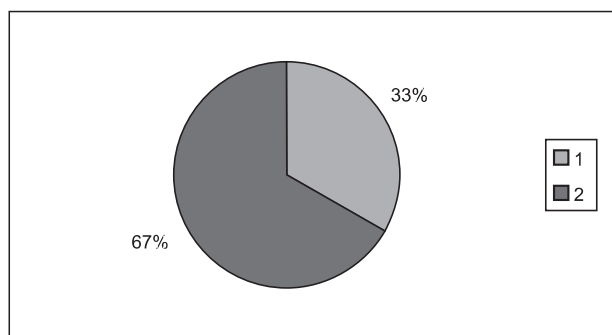


Figure 1.

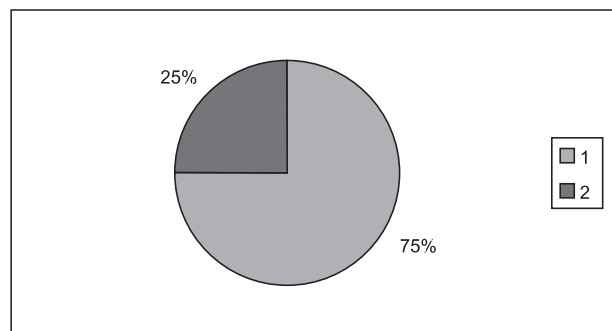


Figure 2.

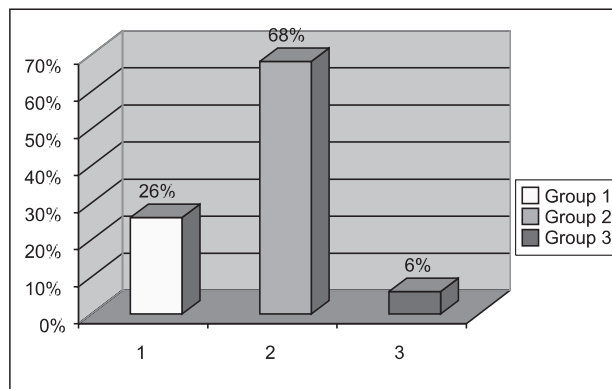


Figure 3.

tients treated in the University Hospital for Tumors, Zagreb, Croatia during 2001 (Figure 1).

In 75% of the cases, primary tumor was less than 2 cm, and in the remaining 25% between 2-3 cm in size (Figure 2).

Referring to their age structure, 26% and 68% of the patients were under 50 and 60 years of age, respectively, while 6% of the patients were older than 60 years (Figure 3).

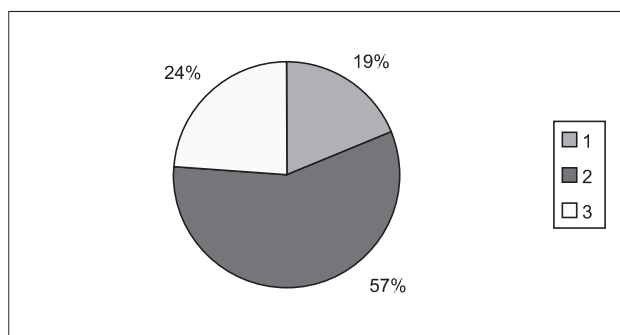


Figure 4.

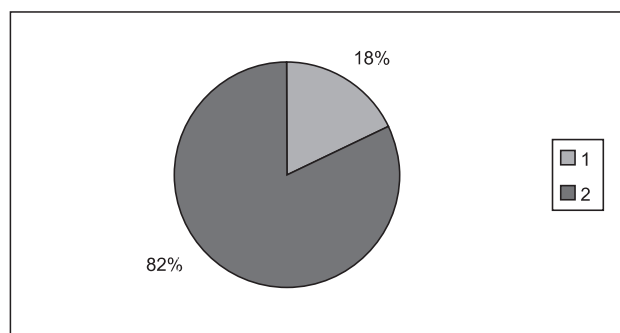


Figure 5.

As regards pathohistologic findings, DIC grade II, grade I and grade III accounted for 57%, 24% and 19% of the cases, respectively (Figure 4).

Regional lymph node involvement was found in 18%, while in 82% of the cases tumor cells were not present in regional lymph nodes (Figure 5).

Analysis of the relationship between regional lymph node involvement and the pathohistologic grade of tumor differentiation showed the presence of malignant cells in 63% of DIC grade III tumors, while the regional lymph node positivity in DIC grade I and II tumors occurred by half the frequency.

## DISCUSSION

The percentage of conservative surgical procedures for breast cancer of 33% complies with guidelines on the surgical management of breast cancer (5).

Analysis of the primary tumor size showed that in the University Hospital for Tumors

breast-conserving surgery is performed primarily for tumors less than 2 cm in size. In a lesser percentage of the cases, conservative surgery is applied to tumors exceeding 2 cm in size.

Analysis of patients' age demonstrated that the majority of the patients were under 60 years of age, or the patients in whom the esthetic outcome is of utmost importance (8, 9).

Distribution of patients by pathohistologic grades of tumor differentiation in correlation with radical surgery showed to be the same.

Regional lymph nodes were involved in only 18% of the patients due to the preoperative insistence on performing breast-conserving surgery only in patients with clinically negative axilla.

## CONCLUSION

Surgical treatment for breast cancer remains the dominant method despite a number of minor changes in approach. While some twenty-odd years ago, a diagnosis of breast cancer meant removal of the entire breast and beyond, today the same result (both success or failure results) can be achieved with conservative care.

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