

Psychogenic reaction	Incidence		
	Group I (n = 25)	Group II (n = 30)	Group III (n = 20)
Situational anxiety	53.5±6.3	54.3±6.7	47.2±5.8*
Personal anxiety	54.0±5.0	56.2±9.5	47.5±10.8*
Hostility	52.1±23.2	53.8±13.5	45.2±19.8*
Autoaggression	73.8±17	73.2±16.1	63.5±15.3*

*p < 0.05 versus groups I and II.

5141

POSTER

Complications of Immediate Breast Reconstruction After Skin Sparing Mastectomy Do Not Cause Delay of Onset of Adjuvant Chemo- or Radiation Therapy

O. van Waardhuizen¹, M. Martens¹, D. van Mierlo¹, R. Schipper¹, M. Lobbes², S. Tuinder³, E. Heuts¹, M. Smidt¹. ¹Maastricht University Medical Centre, Surgery, Maastricht, The Netherlands; ²Maastricht University Medical Centre, Radiology, Maastricht, The Netherlands; ³Maastricht University Medical Centre, Plastic Surgery, Maastricht, The Netherlands

Background: The incidence of all types of immediate breast reconstruction (IBR) after a breast cancer operation is rising, offering patients enormous advantages in terms of quality of life. This study only concerns IBR after skin-sparing mastectomy (SSM). Safety of this procedure is a critical issue and can be measured in terms of local recurrence. Published studies show no rise though compared to the standard mastectomy. Another consequence could be the higher risk for complications and therefore the possible delay in the start of any adjuvant therapy. The aim of this study was to evaluate the incidence of complications after SSM with IBR in patients treated for invasive breast cancer or ductal carcinoma in situ (DCIS), whom received adjuvant chemo- or radiation therapy in a single dedicated institute and to assess whether they affect the interval between surgery and adjuvant therapy.

Methods: Data of all SSM with IBR patients were both prospectively and retrospectively collected in a database between 2004 and 2011. The database consists of 251 SSM with IBR. Only patients treated with adjuvant chemotherapy and/or radiation therapy were included (n = 60); 95% (n = 57) with invasive carcinoma and 5% (n = 3) with DCIS. Further patients characteristics are collected in Table 1. Almost all SSM and IBR were performed by a dedicated team of oncologic and plastic surgeons. Descriptive statistics and unpaired t-tests were conducted.

Table 1: Patient and tumour characteristics of 60 patients who received SSM with IBR and adjuvant therapy

	Without complications	With complications	p-value
Patients, n	44	16	
Mean age, y (range)	48.4 (25–66)	48.4 (29–67)	0.991
BMI (kg/m ²)	23.9 (16–30)	24.0 (19–33)	0.735
Smoking (%)	27.3	12.5	
Mean tumour size, mm (range)	27.2 (0–200)	25.2 (0–70)	
Primary tumour (%)			
T0	3 (7)	1 (6.3)	
Tis	3 (7)	0	
T1	17 (39.5)	6 (37.5)	
T2	15 (34.9)	7 (43.8)	
T3	4 (9.3)	2 (12.5)	
T4	1 (2.3)	0	
Nodal status			
N–	24 (55.8)	8 (50)	
N+	19 (44.2)	8 (50)	
Neo-adjuvant chemotherapy	9	1	
Number of breast reconstructions, n	54	22	
Unilateral	32	10	
Bilateral	11	6	
Complications, n (%)			
Flap necrosis		4 (25)	
Wound infection		10 (62.5)	
Haemorrhage		6 (37.5)	

Results: Some form of flap reconstruction was performed in 19 breast of the uncomplicated group and in 7 breast of the group with complications. A tissue expander or direct prosthesis was placed in 35 and 15 breasts, respectively. The number of patients with complications was 16 (26.7%). In 9 patients, the complications of surgery occurred before the start of adjuvant therapy; in 7 during adjuvant therapy. In none of these patients, adjuvant therapy was paused due to complications. The mean number of days between the IBR and the start of adjuvant chemo- or radiation therapy was 28.6 in the group with complications. For the uncomplicated group, this period was 32.6 days. However, this is not significant (p = 0.46).

Conclusions: Complications associated with SSM with IBR do not delay the start of indicated adjuvant chemo- or radiation therapy.

5142

POSTER

Immediate Breast Reconstruction (IBR) After Skin-sparing Mastectomy (SSM) Does Not Increase the Risk of Loco Regional Recurrence or Distant Metastases

D. van Mierlo¹, R. Schipper¹, O. van Waardhuizen¹, M. Martens¹, W. Peeters², C. Boetes³, E. Heuts¹, M. Smidt¹. ¹Maastricht University Medical Centre, Surgery, Maastricht, The Netherlands; ²Maastricht University Medical Centre, Plastic Surgery, Maastricht, The Netherlands; ³Maastricht University Medical Centre, Radiology, Maastricht, The Netherlands

Background: An immediate breast reconstruction (IBR) after skin-sparing mastectomy (SSM) offers breast cancer patients enormous advantages in terms of quality of life. Safety could be measured as the amount of retained breast tissue in the skin flap, but this is impossible to measure, though definitely present. The clinical consequence of retained breast tissue is loco-regional recurrence (LRR) and distant metastases. Most published studies concerning this issue show low patient numbers and/or a short follow-up period. An accepted recurrence rate is 0.5–1% per year. The aim of this study was to evaluate the incidence of local, regional and distant recurrence after SSM with IBR in patients for invasive breast cancer (IBC), DCIS or prophylactic indication in a single dedicated institute.

Methods: Data of all SSM with IBR patients were both pro- and retrospectively collected in a database. 182 patients underwent a total of 249 SSM with IBR for invasive breast cancer (n = 112), DCIS (n = 42) or prophylactic risk reduction (n = 95) between 2004 and 2011. Patient and tumour characteristics concerning DCIS and IBC are collected in Table 1. The median age of the patient undergoing a SSM with IBR for prophylactic indication was 45.3. Only in two of these patients invasive cancer was detected in definitive pathology.

Table 1

	DCIS	IBC	Recurrence
Median age, y (range)	50.8 (32–69)	48.69 (24–69)	42 (36–48)
Tumour size, mm (range)	40 (4.5–120)	16.5 (2–200)	23 (13–80)
Primary tumour, N (%)			
T0	3 (7.9)	9 (8.0)	0
Tis	35 (92.1)	2 (1.8)	0
T1	0	58 (51.8)	2 (66.7)
T2	0	34 (30.4)	1 (33.3)
T3	0	8 (7.1)	0
T4	0	1 (0.9)	0
Grade			
1	6	19	0
2	8	39	3
3	17	42	0
Unknown	11	13	0
Location			
Multicentric/focal	34	105	3
Unifocal	4	7	0
Unknown	4	0	0
Nodal status			
Negative	40	64	2
ITC+	2	8	0
Positive	0	40	1
Estrogen receptor status			
+		80	3
–		32	0
Therapy			
Neo-adj. chemotherapy		12	
Adjuvant chemotherapy		59	
Hormonal therapy		52	
Radiation therapy	4	25	

All SSM and IBR were performed by dedicated oncologic and plastic surgeons. A total of 263 reconstruction procedures were performed including deep inferior epigastric perforators (DIEP n = 85), transverse rectus abdominis muscle (TRAM n = 18), superior gluteal artery perforator (SGAP n = 1), tissue expander (TE n = 119), immediate prosthesis (IP n = 32), latissimus dorsi (LD n = 7), transverse myocutaneous gracilis (TMG n = 1) and combinations of the previously mentioned.

Results: The mean follow-up was 28 (1–82) months. Local recurrence (LR) occurred in 3 patients (1.9%, non-significant), and was detected after a period of 5, 16 and 21 months. All of these patients were initially treated