

- interventional radiology in trauma. *BMJ* 2010;340:c497.
2. Pryor JP, Braslow B, Reilly PM, et al. The evolving role of interventional radiology in trauma care. *J Trauma* 2005;59:102-4.
 3. Dente CJ, Feliciano DV, Ball CG. Interventional radiology in abdominal vascular injury. In: Tisnado J, Ivatury RR, editors. *Interventional radiology in trauma*, 1st ed. New York (NY): Thieme Medical and Scientific Publishers; 2011.
 4. Martinelli T, Thony F, Deciety P, et al. Intra-aortic balloon occlusion to salvage patients with life-threatening hemorrhagic shocks from pelvic fractures. *J Trauma* 2010; 68:942-8.
 5. Ashleigh RJ, Butterfield JS, Asquith J, et al. A cross-site vascular radiology on-call services: the Manchester experience. *Clin Radiol* 2005; 60:389-93.
 6. Miller PR, Moore PS, Mansell E, et al. External fixation or arteriogram in bleeding pelvic fractures: initial therapy guided by markers of arterial hemorrhage. *J Trauma* 2003;54:437-43.
 7. Morozumi J, Homma H, Ohta S, et al. Impact of mobile angiography in the emergency department for controlling pelvic fracture hemorrhage with hemodynamic instability. *J Trauma* 2010;68:90-5.
 8. Arthurs ZM, Sohn VY, Starnes BW. Ruptured abdominal aortic aneurysms: remote aortic occlusion for general surgeons. *Surg Clin North Am* 2007;87:1035-45.

MAMMAPLASTY FOR SYMMETRY IN BREAST RECONSTRUCTION AND HISTOLOGIC ASSESSMENT

We read with interest the article by Horo and colleagues¹ about the prevalence of borderline lesions and in situ/invasive cancer in specimens of the contralateral breast (CB) in patients with breast cancer. As a multi-professional breast cancer team, it has been our impression that increasing consideration has been focused on reconstructive techniques, and mammoplasty remains a useful and important procedure. Whereas satisfactory results may be obtained with all reconstructive procedures, in our previous experiences,²⁻⁴ mammoplasty leads to a better overall outcome in patients with breast ptosis/macromastia. Besides these aesthetic benefits, one of the main advantages is the possibility of examining the CB.⁵ Thus, this paper is relevant and, again, illustrates the

value of these important issues.

Although many of the data described are valuable and interesting, the clinical relevance to be drawn from the results and discussion deserves clarification. As the authors point out, few authors have assessed the incidence of occult lesions in this particular scenario of mammoplasty with a treated cancer of the CB. The authors concluded that no invasive/in situ carcinoma was detected. However, in the limited sample of 77 patients who underwent a mammoplasty of the CB, normal results were observed in 45.5%, benign lesions in 38.9% and borderline lesions in 15.6% of patients. Besides the potential bias regarding the differences in patient populations, the absence of breast cancer detected in this sample can be attributed in part to the limitation of the number of patients included in the study and some bias related to the retrospective design. In our experience, 4.3% of patients who underwent immediate mammoplasty for conservative breast surgery reconstruction received a diagnosis of breast cancer on the contralateral breast (3 patients with ductal carcinoma in situ and 2 with invasive lobular carcinoma).⁵ Both cases of lobular carcinoma were diagnosed by intraoperative frozen sections and showed favourable characteristics (small diameter/estrogen receptor positivity). Thus, it has been our impression that the risk in this particular scenario increases in patients with previous breast cancer. In addition, patients with previous breast cancer are at higher risk for new contralateral cancer. Usually, it is expected that the incidence of metachronous breast cancer (MBC) ranges from 1% to 12%.⁵ One might surmise that this ample incidence deviation relates to differences in follow-up, methods of detection, histologic techniques and the inclusion of noninvasive tumours. Additionally, a young age at the time of the first breast cancer and a longer survival time may increase the risk for MBC. In our sample, almost 8.5% of patients had an MBC detected during

follow-up. Review of the cancer characteristics revealed that most cancers were at an early stage and all were unifocal tumours. Regarding the histologic type, about 65% of patients had invasive ductal carcinoma and almost 30% had a family history of breast cancer. Another relevant point is related to the period between the diagnosis of the first tumour and the MBC. In our study, more than 80% of these tumours appeared within 5 years of the original one. Despite these data, the MBCs in 2 patients were diagnosed more than 7 years after the first breast cancer, which highlights the importance of longer follow-up periods to estimate the real incidence of MBC and the appropriate treatment.

Finally, another important issue is related to the influence of the mammoplasty techniques in the follow-up. In spite of the aesthetic benefits, do the authors have difficulties with surveillance for cancer in breasts that have undergone reduction mammoplasty? This question refers particularly to the distortion of normal architecture and the production of microcalcifications secondary to fat necrosis, hematoma or fibrosis. In our experience, fat necrosis and local tissue distortion were observed in almost of 6% of patients who had CB mammoplasty. Although mammographic discrimination between tumour recurrence/MBC and fat necrosis can be differentiated in major cancer centres, we advocate for a careful surveillance and invasive diagnosis to elucidate this important issue.

Immediate CB mammoplasty in association with oncologic breast surgery is not a new concept but is becoming increasingly accepted by oncologic surgeons. The technique provides an opportunity for diagnosis of breast cancer risk lesions, and post-operative adjuvant chemotherapy is not delayed. It has been our impression that there is evidence of reduction of MBC during follow-up, and we totally agree that a larger number of patients are necessary for significant conclusions. Thus, additional studies of breast