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Letters to the Editor

How Can We Decrease Mortality Due to Anastomotic Fistula in Colorectal Surgery?☆

¿Cómo disminuir la mortalidad de la fístula anastomótica en cirugía colorrectal?

Dear Editor,

In his recent editorial, Parés described the measures that could reduce fistula-caused mortality in colorectal surgery (in the failure to rescue), insisting on the importance of "a good visit in the rounds and the human capacity to detect and respond early to clinical signs which patients display when they have a complication".[1] This is a major problem in colorectal surgery, as is confirmed by the results of ANACO.[2] Without belittling the importance of doctors' rounds and their clinical sensitivity, their value is quite limited in the early detection of a colorectal fistula. The literature shows that surgeons' impressions are as unreliable as the clinical signs we were taught "when we were very young".[3,4] Clinical signs appear at the end of the first week after surgery (on the 6th day in ANACO and on the 7th in the Danish national study and in IMACORS).[2,5,6] By that time there is already, in general, severe peritonitis and symptoms of sepsis. Due to this we cannot wait for these manifestations if we wish to improve the results of the failure to rescue; an early diagnosis is indispensible. C-reactive protein (CRP) is currently the best early marker of intra-abdominal infection, as it warns before a fistula and its disastrous consequences appear.[7,8] Its levels rise significantly, more from the first postoperative day in those patients who will go on to present the classic symptoms 5 days later.[8,9] Procalcitonin offers nothing in comparison with CRP, and it is 25 times more expensive.[6] A recent meta-analysis confirmed that the best day to measure CRP is the 4th, as it is then that the markers attains its greatest discriminatory power.[10] We have nothing else with so much scientific evidence in its favour and which is so cheap and easy to use in case of failure to rescue as CRP. Due to its high negative predictive value (>95%) it is included in fast-track and ERAS protocols. A patient with CRP <100 mg/l on the 4th day can be discharged with a minimum risk of complications. It remains to be decided what to do when patients have higher levels, because scanning on the 4th day seems to give a lot of false negatives. If we wish to improve failure to rescue, we should centre on managing those patients with a CRP >100 mg/l on the 4th day. Future studies of this subject will have to discuss the usefulness of early scanning (probably with water-soluble rectal contrast), together with the role of endoscopy (diagnostically and potentially therapeutically) and additional surgery.

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Brachial Plexus Lesions in Breast Surgery. Recommendations for Prevention☆

Lesiones del plexo braquial en la cirugía mamaria. Recomendaciones para su prevención

Dear Editor,

In a recent article in your journal, Colsa Gutiérrez et al.[1] reviewed intraoperative injuries to peripheral nerves in colorectal surgery. As in abdominal surgery, breast surgery can lead to neurological injuries during the immediate postoperative period that are not related with the surgical technique but instead with the positioning of the patient on the operating table. Therefore, a critical analysis of each case is necessary for the prevention of these adverse effects and to improve patient safety, which are the responsibility of medical professionals. In this Letter to the Editor, we will describe our experience in neurological lesions after breast surgery in order to discuss possible causes and, above all, recommendations to avoid them.

Between January 2000 and June 2015, 1501 surgical procedures were performed in women with breast cancer. During the immediate postoperative period, 4 neurological deficits were observed secondary to injury to the brachial plexus, which was an incidence of 0.002% (Table 1). The surgical techniques performed were mastectomy with axillary lymph node dissection, bilateral vertical mammaplasty, latissimus dorsi flap reconstruction and replacement of breast expander with definitive prosthesis. The mechanisms related with neurological injury were diverse and included the use of retractors on the brachial plexus, hyperabduction of the upper extremity and its elongation in lateral decubitus (Fig. 1). In one case, axillary fibrosis secondary to radiotherapy predisposed the patient to functional limitation prior to surgery, which conditioned the appearance of postoperative paralysis in spite of the correct placement of the limbs during the intervention. The neurological deficits affected the sensitivity and mobility of the upper limb, and recovery was variable (between 6 and 28 weeks). The patients were evaluated by the rehabilitation unit, and all were diagnosed with injury to the brachial plexus (neurapraxia), with no evidence of distal nerve injury in any of the cases. The 4 patients recovered their neurological function, although one presented chronic sensory neuropathy in the proximal region of the upper extremity.

Iatrogenic injury to the brachial plexus is an uncommon occurrence in breast surgery, and its exact incidence is unknown because most authors have published isolated cases of neurological injury.[2] Breast surgery presents factors for the appearance of paralysis of the brachial plexus; oncoplastic and reconstructive procedures are characteristically long in duration and involve postural changes as well as the need for positioning the upper limbs in abduction.[2–4] This predisposition affects not only oncological procedures but also later reconstructive surgeries, where manipulation of patient position is also required.[5] The explanation of this predisposition lies in the vulnerability of the brachial plexus due to its anatomical factors: its attachment between fixed points (foramen and axillary fascia), its passage through a narrow canal between the clavicle and first rib, its relationship with bony protuberances (head of the humerus and ulna),[2–4] and the fibrosis of the axillary canal after radiation.[6]

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