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POST-THORACOTOMY/SCOPY SHOULDER PAIN: PRELIMINARY STUDY.

INTRODUCTION

In recent literature, the incidence of constant severe ache in the ipsilateral shoulder of patients following thoracic surgery vary between 31 to 97% of the cases (1,2,3,4). This pain is very intense while the patient stays in the recovery room. Considering that the true origin of this pain is poorly understood; we are planning a comprehensive study on this subject. To get a better design of this future extensive protocol we realized a preliminary observatory study to measure the incidence and determinants of shoulder pain following thoracic surgery.

METHOD

Local IRB approval was obtained for this study. This study was realized between September and December 2006. Every consecutive patient undergoing an elective thoracic surgical procedure realized by thoracotomy, thoracoscopy, or sternotomy (excluding cardiac and great vessels surgery) were observed for the presence of shoulder pain during their stay in the recovery room. We also recorded some demographic data. The Fisher exact test was performed to analyze categorical data.

RESULTS:

We observed 75 patients during this 13 weeks period. Sixteen patients (21.33%) presented shoulder pain. There are no statistically significant difference between the group of pain free patients and the group of patients presenting shoulder pain, concerning the age, the sex, the surgery (approach, side, or type of resection), and presence of thoracic drainage or ipsilateral central venous catheter. The patients in the shoulder pain group had more frequently regional analgesia (continuous peridural or paravertebral blockade) than the group of pain free patients (93.75% vs 55.93%; $p=0.0068$).

DISCUSSION:

This preliminary study demonstrates that: The incidence of shoulder pain post-thoracotomy/scopy in our population (21%) is less than the incidence generally reported in the literature (31%- 85%) and shoulder pain is more frequently associated with regional analgesia (93.75% vs 55.93%). A possible explanation is that patients without regional analgesia received more systemic analgesics during and after the procedure, so they may not feel shoulder pain rather than concluding that regional analgesia is ineffective against post-thoracotomy shoulder

pain (4). We are planning a more extensive, prospective and observational study to measure risk factors to develop shoulder pain following thoracotomy/scopy.

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