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INJURY IN AXILLARY THORACIC DUCT

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Introduction: In adults, the lymph flow through the thoracic duct presents about 4 liters a day; therefore, its injury may lead to accumulation in the pleural cavity, causing acute and chronic changes in pulmonary function. However, if less frequent, such an accumulation can still be observed in surgery, as was the case of the patient reported in this study. The injuries are not so frequent and may be caused by neoplasms or during surgical procedures in in the thoracic region and trauma, such as esophagectomy, mediastinal and pleuropulmonary surgeries. The early recognition and adequate therapy for the fistula in the thoracic duct prevent secondary nutrient and lymphocyte depletion. Clinical diagnosis is mostly based on high chest drain output, accompanied by the milky aspect. Besides, computed tomography, lymphoscintigraphy and lymphoangiography are possible methods for diagnosis. The clinical series about injuries in the duct after thoracic surgeries report that 25% to 50% of the cases present the spontaneous closure of the fistula only with conservative measures, such as the introduction of parenteral nutrition or enteral diet with medium-chain triglycerides. The persistence of the fistula leads to the need for clinical-surgical treatment. **Objective:** To report the case of rare post-surgery complication in a patient submitted to modified radical mastectomy (left) with immediate breast reconstruction. Results: Forty-eight year old woman born in Santana do Parnaíba – SP, diagnosed with left-breast cancer, invasive breast carcinoma histological type, Luminal B, submitted to modified radical mastectomy (left) (Madden technique), with immediate breast reconstruction. The intraoperative period showed major impairment in left axillary lymph nodes involving lymph vessels and nodes. In the postoperative period, she presented high drainage in the suction drain, with milky aspect, in the left axillary region. Then came the hypotheses of surgical complications, such as secondary infection, seroma, and thoracic duct injury, or in some branch. The biochemical analysis of the milky fluid showed high concentration of triglycerides, and cytology described the presence of proteinaceous material and macrophages. A conservative conduct was chosen, with adjustment of hyperproteic, hypoglycific diet, rich in medium-chain triglycerides. Twenty days after tha diagnostic hypothesis, the patient underwent lymphoscintigraphy, which did not show the fistula. She evolved with gradual output reduction until the removal of the drain, and was discharged from the hospital in good conditions. At the time, the patient continues with the adjuvant treatment for breast neoplasm. **Conclusion**: Post-surgical lymphatic fistula in the axillary region is a rare complication; however, its early diagnosis and treatment is essential in order to prevent complications, such as malnutrition and worsened immunological status.