





ANTERIOR SURGICAL APPROACH TO PANCOAST TUMOUR WITH PRESERVATION OF STERNUM AND CLAVICLE

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a) Introduction We describe a variant of the anterior approach for the resection of a Pancoast tumour avoiding the section of the sternal or clavicular manubrium by completing the lobectomy through the same incision and subsequent reconstruction with a 3D dynamic prosthesis. b) Indication for the technique Pancoast tumours without involvement of the anterior chest wall, sternum or clavicle. c) Description of the technique We performed a left upper lobectomy with resection of the ipsilateral first, second and third ribs through an anterior approach with rib's section at the proximal sternal level and distally at the level of the posterior arches without performing manubriotomy or clavicular section. The posterior section was performed with a costotome of our own design. Subsequently, we completed the lobectomy through the same anterosuperior approach and inferior support incision for the use of endo staplers. The chest wall defect was reconstructed with a biological mesh and a customised 3D dynamic titanium prosthesis of the second and third costal arches, which were fixed to the sternum with selflocking screws anteriorly and with a braided wire system in the posterior costal arches. d) Conclusion The anterior approach without sternal or clavicular section provides rapid recovery and mobilisation of the patient and, allows lung resection without using additional thoracotomies. The reconstruction with customised 3D dynamic prostheses provides an anatomical correction, reducing surgical time, allowing better respiratory mechanics and reducing postoperative pain.