





DESCENDING NECROTIZING MEDIASTINITIS: KEY POINTS TO REDUCE MORTALITY

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Descending necrotizing mediastinitis (DNM) is an acute life-threatening infection that originates in the oropharyngeal region. It is an uncommon disease with a mortality rate of about 20–40%. This high mortality is mainly attributed to delays in diagnosis and treatment and poor drainage of the mediastinum. We have recently published a retrospective case series and reviewed the key points that may help reduce mortality.

We analyzed the clinical outcomes of seven patients diagnosed with DNM between March 2019 and July 2022 at Hospital de la Santa Creu i Sant Pau. The primary oropharyngeal infection was peritonsillar abscess in three cases and odontogenic abscess in four. All patients showed symptoms of severe cervical infection and symptoms suggestive of mediastinitis. A cervicothoracic computed tomography (CT) scan confirmed the presence of cervical and mediastinal collections and emphysema in all cases. All patients were simultaneously evaluated by the otorhinolaryngology and thoracic surgery teams. Broad-spectrum antibiotic therapy was instituted pending culture. All the patients underwent urgent surgery, consisting of cervicotomy to control the cervical focus and unilateral or bilateral video-assisted thoracoscopic debridement and drain of the pleural cavities and mediastinum. Regarding the outcomes, no patients died, one patient (14.2%) underwent transcervical mediastino-thoracoscopy drainage only. In six patients (85.8%) we performed a combined transcervical and transthoracic approach. Reoperation was required in 3 (43%) cases. The parameter that indicated a poor clinical evolution in these patients was an increase in C-reactive protein and the infection extension on the cervicothoracic CT scan. The follow-up was 30 days from last surgery.

In conclusion, based on our experience, the key points that can help reduce the high mortality associated with DNM are a rapid multidisciplinary assessment and a combined surgical procedure, considering the minimally invasive approach as the first option to drain the pleural cavities and the mediastinum.