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Oesophageal Stenosis Dilatation Through Retrograde Trans-gastrostomal Approach in a Patient with Systemic Scleroderma

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Abstract

Aim: The paper presents the surgical solving of an oesophageal stenosis, using a device of pneumatic dilatation with trans-gastrostomal approach, in a patient with multiple disabling handicaps, secondary severe malnutrition and previously diagnosed with scleroderma.

Materials and method: The patient was admitted with severe cachexia (37 kg, 170 cm), characteristic byzantine face with microstomy, distal phalanges resorption in both superior limbs and complete dysphagia, with limitation of mouth opening. The Barium swallow test revealed distal oesophageal stenosis, with an important dilation of the oesophagus above.

Results: A gastrostoma was placed to allow nutrition (Gavriliu procedure), under general anaesthesia with trans-tracheostomal intubation. After 3 years, with her metabolic status improved (59 kg), the patient returned to our clinic asking for a solution for natural feeding. The technical difficulties in solving this case were determined by the limited mouth opening, which made anterograde oro-oesophageal balloon dilatation or bougienage impossible, as well as oro-tracheal intubation. Making use of the presence of the gastrostomal orifice, knowing von Hacker's mechanical dilation procedure and using the metallic Key Med kit with balls offered the possibility of the tactics and strategy of guiding a metallic guidewire introduced via the gastrostoma, then trans-stenotic and pulled out through the oral orifice. A modified Foley catheter (personal procedure) was attached to the initial catheter. The trans-stenotic retrograde traction of the Foley balloon was the pneumatic dilator factor that later allowed easy dilatation with the metallic dilator of the Key Med, to the maximum size. The follow-up showed good results, the patient returned to natural nutrition.

Conclusions: The device of oesophageal pneumatic dilatation allows, using the presented surgical technique, a gentle plasty done under radiological supervision and lowers the frequency of accidents. The dilation permits the following use of Key Med kit. The novelty consists in adapting a well-known technique to a new patented device of pneumatic dilation with bidirectional approach under radiological control, for solving this atypical case.

Key words: scleroderma, oesophageal stenosis, trans-gastrostomal approach

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