Lemierre Syndrome in adolescent population: the importance of differential diagnosis of oropharyngeal Infections with unfavorable evolution

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BACKGROUND

- Lemierre syndrome (LS) is an uncommon but potentially dangerous disease in children.; its incidence was drastically reduced with the introduction of penicillin. It is a severe disorder characterized by pharyngitis, septic thrombosis of the internal jugular vein and distant septic metastasis mainly caused by *Fusobacterium necrophorum*

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CASE PRESENTATION SUMMARY

- A 15-year-old boy had been suffering from lateral-cervical pain for about 1 week, in association with intermittent fever of up to 39°C. Initially it was diagnosed as muscle contracture. Due to the persistence of cervical pain, without fever, and the appearance of cervical swelling, he visited the ER for the third time.
- Blood test: CRP 186 mg/L, 17590 leukocytes (65.3% N). Ultrasound (US) showed right-sided cervical adenopathy conglomerates. Empirical treatment with amoxicillin-clavulanic acid was initiated, combined with corticosteroids for four days. A significant reduction of the swelling was observed however the pain persisted. US demonstrated a growth in size of the conglomerates with presence of cystic areas.
- A puncture was made with the extraction of a large quantity of pus. Clindamycin was started. CT scan showed a latero-cervical abscess and jugular vein thrombosis. The abscess was drained and the patient was treated with meropenem and heparin with clinical improvement. *F. necrophorum* was detected by PCR and culture.

LEARNING POINTS

The exceptionality and diverse clinical picture of LS can have an impact on the difficulty of its initial diagnosis since it is not suspected in the context of oropharyngeal infections with torpid unfavourable evolution. It presents a high morbidity and mortality in the absence of treatment, but with a good prognosis and early infection control complications derived from thrombosis can be avoided