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PHOTO QUIZ

Feverless red neck: why worry?

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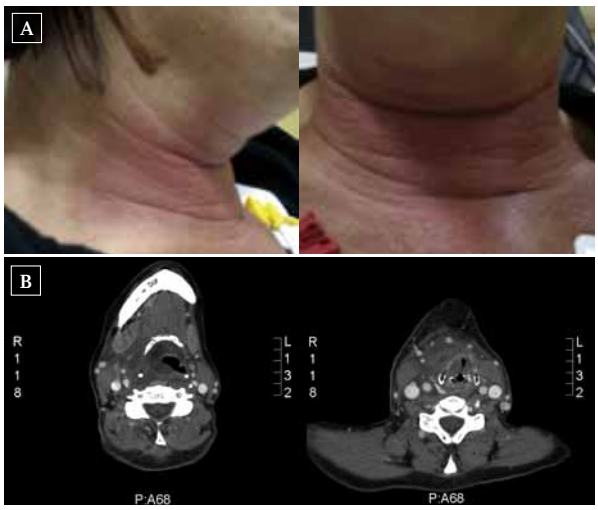
A 62-year-old woman presented at the emergency department because of progressive throat pain and pain on swallowing for two days. She noticed a red painful area on the ventral side of her neck, spreading out in all directions. There was no fever and no shortness of breath. A few days before becoming ill, she visited her grandson who at the time was feverish with blisters on the face. Physical examination revealed a mildly ill patient without stridor, normal oxygen saturation, respiration rate 24/min, body temperature 36.3 °C, and a normal blood pressure and heart rate. Mouth inspection revealed some pharyngeal redness. The trachea was slightly displaced. There were signs of inflammation (heat, pain, redness and swelling) in the prethyroidal region (*figure 1A*) and multiple enlarged and slightly tender lymph nodes in the neck. Laboratory analysis showed a C-reactive protein of 405 mg/l and severe leucocytosis (31.7*10^9 /l). A CT scan of the neck was performed (*figure 1B*).

Figure 1.



(The patient has given her consent for the publication of the pictures presented in figure 1A)

WHAT IS YOUR DIAGNOSIS?

See page 474 for the answer to this photo quiz.

DIAGNOSIS

The differential diagnosis focused initially on infectious conditions that may arise in the neck region, including an abscess, cellulitis, thyroiditis or pharyngolaryngitis. The CT showed a large abscess in the right tonsil region, parapharyngeal, retropharyngeal and supraglotic intralaryngeal spreading out towards the superior mediastinum (*figure 1B*). Blood cultures and an abscess puncture delivered a group A beta-haemolytic streptococcus (GABHS) confirming the diagnosis of a retropharyngeal abscess (RPA) with GABHS. Because of a history of penicillin allergy, treatment was started with intravenous clindamycin and ceftriaxone. The patient was intubated to prevent airway obstruction, admitted to the ICU and the abscess was surgically drained. Recovery was uneventful with detubation after one week and discharge after two weeks.

RPA is a rare entity in adults, with only 51 cases reported between 1975 to 1995.[1] However, an increasing incidence per decade has been suggested, possibly resulting from improved diagnostic techniques (i.e. CT scanning). Interestingly, the incidence of RPA due to GABHS has increased in the last decade, with some reports indicating a frequency of 54%.[2] Intriguingly, 30% of RPA in children presents without fever and 21% have no subjective complaints of upper airway obstruction,[3] despite severe CT abnormalities (as was the case in our patient). Although GABHS is sensitive to penicillin and clindamycin, the initial treatment of RPA should also cover possible Gram-negative bacteria.[4] It is important to stay alert to the development of toxic shock and possible post-streptococcal complications, i.e. glomerulonephritis and reactive arthritis. According to the national guidelines, family members should receive chemoprophylaxis when there is evidence of a streptococcal septic shock syndrome or necrotising fasciitis.[5] In conclusion, RPA is a severe life-threatening infection that can be missed easily because of the absence of fever and subjective respiratory problems. A CT scan may prove helpful for both formulating the diagnosis and the further therapeutic approach. Appropriate treatment with antibiotics and surgical drainage is normally followed by complete recovery and prevents further local, respiratory and systemic complications.

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