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The management of nontuberculous mycobacterial cervicofacial lymphadenitis – a view beyond surgery

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Conflict of interest

The authors declare no conflict of interest.

We read with interest the article by Harb *et al.* suggesting surgery should be offered to all children with cervicofacial nontuberculous mycobacterial (NTM) lymphadenitis.¹ This conclusion is based on only four cited studies. As summarised in our recent meta-analysis, many other studies have investigated the three main management options - complete excision, anti-mycobacterial antibiotics and no intervention.²

Although complete excision had the highest cure rate in our meta-analysis,² this is not invariably the best option as suggested by the authors. Management decisions regarding NTM lymphadenitis require an interdisciplinary, individualised approach considering several factors, including disease stage (excision is more likely to be successful in early stages), local surgical expertise, proximity of the lymph node to the facial nerve (complete excision is associated with 10% risk of facial nerve palsy, permanent in 2%), and parental attitude to an invasive procedure compared with prolonged time to resolution with conservative options.^{2,3}

As evidence for ‘no intervention’, the authors summarise results from only two studies, both of which showed a 100% cure rate.^{4,5} However, there are several others,² including a recent study from Finland, that have reported lower rates.⁶ Importantly, 30% of asymptomatic children respond to *Mycobacterium avium* sensitin skin testing (the predominant pathogen in NTM lymphadenitis),⁷ suggesting subclinical and mild disease that is self-limiting is not uncommon.

Regarding anti-mycobacterial antibiotics, Harb *et al.* mention only one randomised controlled trial that had substantial flaws,⁵ as detailed elsewhere.⁸ Although, in our meta-analysis the adjusted mean cure rate with anti-mycobacterial treatment was 73%, the risk of bias is substantial as children with more advanced disease are more likely to receive anti-mycobacterial antibiotics. Furthermore, there was considerable heterogeneity in antibiotic choice and treatment duration across different studies.² In our meta-analysis, adverse events were reported in 68% of children who received anti-mycobacterial treatment, but these were almost universally mild and transient, resulting in management changes in only 3%.² Although the authors state that non-surgical options leave patients prone to fistula formation,¹ in our meta-analysis only 4% of the children treated with anti-mycobacterial antibiotics developed a fistula.²

In summary, the existing evidence to guide the management of NTM lymphadenitis is limited. No randomised controlled trial has compared the three main options. Until such data become available, treatment decisions should be individualised taking into account the above-mentioned factors. Importantly, while complete excision may have the highest cure rate, it also carries the highest risk of serious adverse events.

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