Long-term outcomes of middle-ear surgery in Aboriginal children

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TO THE EDITOR: Chronic suppurative otitis media is very common among Australian Aboriginal children, resulting in hearing loss and educational and social disadvantage.[1] Reconstructive middle-ear surgery has been part of the accepted treatment for decades. However, there are no publications about long-term outcomes in Aboriginal populations.[2] We report here the results of a study of long-term postoperative outcomes in Aboriginal children following reconstructive middle-ear surgery.

We studied all Aboriginal children aged ≤ 15 years who underwent middle-ear surgery for a tympanic membrane perforation (excluding cholesteatoma) in the Kimberley region of Western Australia between 1 October 1986 and 31 December 1995. Data had been collected prospectively during a previous study, and long-term follow-up was undertaken as part of a recent study of middle-ear surgery outcomes.[2,3] Ethical approval was obtained from the WA Aboriginal Health Information and Ethics Committee.

The study population consisted of 93 children (57 girls, 36 boys), aged 5–15 years (mean, 10 years; median, 10 years) at the time of operation. Preoperative air–bone gap (ABG) measurements ranged from 8.75 to 58.75 dB (mean, 36.7 dB; median, 36.25 dB). The operations were performed by nine surgeons at three hospitals and included tympanoplasty using temporalis fascia (73%), dura (13%), and other graft materials (8%), and mastoidectomy (6%).

Sixty-four children (69%) underwent early postoperative review (median follow-up interval, 11 months) and 73 children (78%) underwent late postoperative review (median follow-up interval, 103 months). More of the patients had a late review because, at the time, additional resources were available to actively locate the patients for follow-up. At late postoperative review, 56/93 (60%) patients had a successful outcome (intact tympanic membrane and normal hearing) and 17/93 (18%) did not (20/93 [22%] did not undergo late postoperative review).

Of the 32 patients who had a successful outcome at the early postoperative review (median follow-up interval, 5 months), 26 (81%) underwent late postoperative review; 24/26 (92%) still had an intact tympanic membrane and ABG ≤ 25 dB at late postoperative review (median follow-up interval, 109 months) (Box). These findings indicate that successful tympanic membrane closure with hearing improvement after middle-ear surgery in Aboriginal children is probably longlasting.

The major limitation of our study is the absence of clinical information in the time period (mean, 8 years) between the early and late postoperative reviews. An unknown (but likely to be small) number of patients may have had further operations and/or conservative management, which may have influenced their ear health status at late postoperative review. Collection of these data would have been extremely difficult given the nomadic lifestyle of many patients and the logistical realities of remote-area healthcare.

Our findings support the current recommendation of the Office of Aboriginal and Torres Strait Islander Health that Aboriginal children should be offered tympanoplasty if conservative management of chronic suppurative otitis media is unsuccessful.[4]

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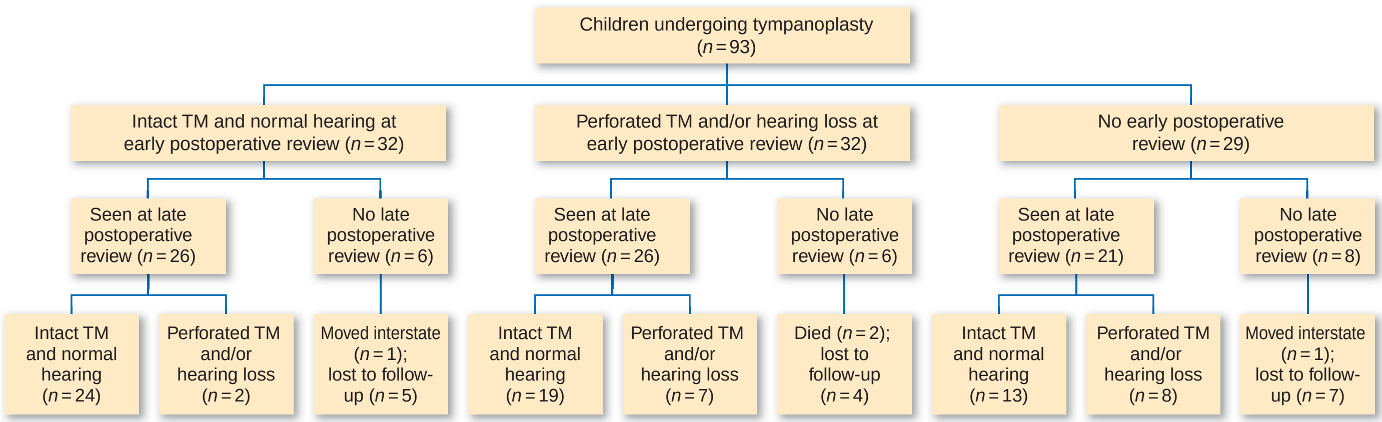
Postoperative review status of 93 Aboriginal children who underwent middle-ear surgery for a tympanic membrane (TM) perforation* in the Kimberley region of Western Australia between 1 October 1986 and 31 December 1995[†]



* Excluding cholesteatoma.

† If a patient had more than one operation, the first ear operated on during this time period was included in the analysis. If a patient had operations on both ears on the same date, the ear with the largest preoperative hearing loss was included. If hearing loss was the same on both sides, the right ear was chosen.

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Detecting people at higher risk for colorectal neoplasia in a community-based screening program

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To the Editor: The burden of colorectal cancer can be minimised, firstly, by early and appropriate investigation of symptoms; secondly, by screening those at higher-than-average risk without symptoms; and thirdly, by community-based screening of asymptomatic people aged over 50 years who are at average risk. Major screening programs using faecal-occult-blood testing (FOBT)[1-3] or flexible sigmoidoscopy[4] have not necessarily made this differentiation. These tests lack the sensitivity of colonoscopy, which is generally indicated for those with symptoms or a strong family history of colorectal cancer.

In our recent community-based screening program in which we used virtual colonoscopy, we excluded those at higher than average risk for colon cancer (that is, they were symptomatic or had at least one first-degree relative with colon cancer), as our standard of care for these patients is colonoscopy. They were given verbal and written advice to see their general practitioner, with the expectation that most should have colonoscopy. They were followed up an average of 12 months (range, 6–15 months) later, by letter and telephone, to determine the outcome of this advice.

Of 2000 participants aged 50–69 years who were offered screening, 90 (4.5%) described having symptoms or a first-degree relative with bowel cancer, but had not undergone investigation. Follow-up information obtained from 71 of these people indicated that 21 had a relevant family history and 50 described recent bowel symptoms. Only 35 (49%) had discussed further investigations with their GPs — 19 (27%) had undergone colonoscopy, and five of these (26%) had advanced colorectal neoplasia (CRN). One had tubular adenoma (> 1 cm), one showed villous architecture, one had intramucosal carcinoma, and two had cancer. Four other participants had had negative results on other investigations. These were FOBT alone in three (two symptomatic, one with family history) and barium enema in one who had bleeding. Common reasons for not consulting their GPs were because of good health (15 participants), resolution of symptoms (12), and perceived lack of need for tests (10).

These data have important implications for CRN screening programs, including recently commenced Australian pilot programs (www.cancerscreening.gov.au). Firstly, there is likely to be an improved yield of advanced CRN when a previously uninvestigated high-risk group is identified within a screening program. Secondly, people identified as having higher-than-average risk for CRN need special attention to ensure there is adherence to advice on appropriate follow-up. Thirdly, procedures are required to ensure colonoscopy is appropriately undertaken when participants do consult their GPs. Accordingly, rather than adopting an exclusion policy within a screening program based on FOBT or flexible sigmoidoscopy, we believe it is appropriate that people at greater risk for CRN are identified and offered colonoscopy within that program.

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Socioeconomic disadvantage and use of general practitioners in rural and remote Australia

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To the Editor: Studies investigating the relationship between socioeconomic status (SES) and use of healthcare services suggest that, in metropolitan regions, low-SES groups consult general practitioners more frequently than high-SES groups.[1] The primary reason is their poorer health and hence greater medical need (however, distributional, operational and financial factors associated with the provision of general practice services are also important).

Is a similar relationship found between SES and GP use in non-

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