This Issue of the Journal

An audit of referrals to the Southern Cochlear Implant Paediatric Programme
Philip Bird, Andrew Botting, Jacqueline Milburn, Daran Murray, Neil Heslop

Cochlear implants are devices which replace the hearing function of the ear and stimulate the nerve of hearing directly. They are used for adults and children whose hearing is so bad that hearing aids cannot help them. In children with pre-lingual deafness (children who have never heard or have lost the ability to hear before they develop speech and language) it is very important to restore their hearing with hearing aids or cochlear implants as soon as possible. For cochlear implants, there is very good evidence suggesting that the children should have their implants by the age of 1. This study was an audit to check on the ages of referral, especially in the pre-lingual children. We found that the average age of referral was unacceptably high. This means that the children may not perform as well with their cochlear implants as they would do if referred earlier. Just under half the children with significant hearing loss have risk factors which would normally be identified and their hearing tested very early on. Unfortunately our study showed that the children with risk factors were not identified and referred on any earlier than children without risk factors which is of great concern. The age of referral of children with significant deafness should drop as universal hearing screening is introduced but there may be significant problems if testing of children’s hearing is not adequately performed in New Zealand.

Trends in the use of minimally invasive surgery in children
Preechapon Pleay Tovaranonte, Spencer W Beasley, Kiki Maoate, Russell Blakelock, Adrian Skinner

This paper summarises the trends in the use of key hole surgery and similar techniques in children (as distinct from adults), and has revealed that a wide range of operations have been adapted to become less invasive. This often leads to less pain after the operation, and shorter hospital stays for these children. Long-term results are probably the same as with conventional open surgery.

Juvenile thyrotoxicosis—a South Island, New Zealand experience with long-term outcome
Bevan E W Brownlie, Penny J Hunt, John G Turner

Thyrotoxicosis (overactive thyroid gland) is very uncommon in children, and is usually due to Graves’ disease which is an autoimmune disease. Follow-up of these children has shown that antithyroid medication is followed by long-term remission in one-third of patients. The remaining patients needed thyroid destructive therapy (ablation) by surgery or radioactive iodine. This was usually delayed until the late teenage years.
The utility of plain radiography in assessment of upper aerodigestive tract fishbone impaction: an evaluation of 22 New Zealand fish species
Tim Ritchie, Martyn Harvey

Fishbones inadvertently lodged in the throat can result in serious complications. Plain X-ray is commonly employed to search for impacted bones. This study examines the ability of X-ray to detect impacted fishbones, in a benchtop model. The results suggest plain X-ray is insufficiently sensitive to exclude the presence of an impacted fishbone when present for the majority of New Zealand fish species.

Helicobacter pylori infection and iron deficiency in teenage females in New Zealand
Alan G Fraser, Robert Scragg, David Schaaf, Patricia Metcalf, Cameron C Grant

Iron deficiency is an important problem in New Zealand children and young adults. A previous study of 8 Auckland high schools showed that 18.3% of girls had iron deficiency. This study assessed the potential role of Helicobacter pylori (H. pylori), a bacterium that can infect the stomach, in causing iron deficiency. 792 female students (median age 16 years) from 7 Auckland high schools had H. pylori serology and tests for iron deficiency. The prevalence of positive H. pylori serology was highest for Pacific Island students (49.0%), intermediate for Maori (26.7%) and Asian (24.7%) and lowest for European (13.7%). Positive H. pylori serology was associated with increased risk of iron deficiency (RR 1.20) (after adjusting for age, ethnicity and school SES decile). This study indicates that H. pylori infection is associated with iron deficiency and should be considered as a possible cause when iron deficiency is diagnosed. This study also confirms the significant public health issue of H. pylori infection particularly for Pacific Islanders who will carry a burden of upper gastrointestinal disease into coming decades, causing both peptic ulceration and gastric cancer, because of high rates of H. pylori infection.