

Letters to the Editor

Cricoid release in a preterm neonate

Dear Sir,

I read with interest the paper entitled “Cricoid release in a preterm neonate” by Drs Farrell and Gray and I am pleased to see that the technique has been used with success.

There are three points I would like to make. In the original report of 12 patients (Cotton and Seid, 1980), eight patients were under 1.7 kg at surgery and the smallest patient was 1.0 kg at surgery. Further experience over the past decade has indicated to me that there is little point in doing the procedure in those infants much less than 1.5 kg because the neonatologist is not going to discharge the patient home until approximately 1.7 kg in weight. Secondly, I need to take issue with the suggestion that continuity of the tracheal mucosa is important. I feel that this is not an important issue and have, in fact, advocated that the tracheal mucosa be purposefully incised to allow for a truly adequate decompression. Thirdly, whether one uses the Zeiss operating microscope or loupes is less important than the fact that the surgical incision be made in the midline of the cricoid and should include at least the first tracheal ring. In this way, the thyroid isthmus is not violated and any bleeding that does occur originates from the mucosa and is minimal.

We continue to use this method of treatment and reported in 1988 of our experience with 67 patients (Cotton *et al.*, 1988). A further recent update of our material indicates 88 patients have undergone this procedure in their institution.

Thank you for the opportunity to address these issues.
Yours faithfully,

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References

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- Cotton, R. T., Myer III, C. M., Bratcher, G. O., Fitton, R. N. (1988) Anterior cricoid split, 1977–1987. Evolution of a technique. *Archives of Otolaryngology Head and Neck Surgery*, **114**: 1300–1392.

Reply

Dear Sir,

Dr Michael Farrell and I greatly welcomed Robin Cotton's interest and comments. It was inspiration derived

from his 1980 paper that encouraged us to try this technique on such a small baby. We chose to report this case because the patient weighed only 620 grams at birth which was the smallest we could find in literature. Also because it was a success.

The procedure was done at 1400 grams because laryngoscopy showed tongues of granulation tissue were beginning to obliterate the laryngeal inlet and both the Laryngologist and the Neonatologist felt it was time that the tube was out, even if the patient was not ready for discharge from Special Care Baby Unit.

The tracheal mucosa was not divided because a previous case of cricoid release dividing mucosa as well, had been a failure. Re-intubation proved impossible when the cut end of the cricoid hung down in the airway and hurried tracheostomy had to be done through blood-stained tissues.

The Zeiss microscope was a great help in sealing small vessels with a bi-polar diathermy such that the blood loss was only 3.5 ml.

Lastly, although our technique differed from that recommended by the master, Robin Cotton's work was our inspiration and has saved this infant a tracheostomy and we are encouraged to repeat the process on other neonates using a better technique!

Yours faithfully,

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Lateral Sinus Thrombosis

Dear Sir,

We read with interest the report by Janet O'Connell on three cases of lateral sinus thrombosis (1990). We recently treated a young girl with a similar problem and briefly report her clinical course. This report warns of potential pitfalls in diagnosis and treatment.

A 17-year-old girl saw her general practitioner with an upper respiratory tract infection that included a left acute otitis media. This was treated with oral erythromycin. Six days later she was admitted under the care of the physicians with meningitis. She was delirious with a temperature of 40.4°C. She had meningism, was photophobic and complained of left subcostal pain. Examination revealed left proptosis, a partial left rectus palsy and hypo-aesthesia in all three divisions of the left trigeminal nerve. She had evidence of a bronchopneumonia and a tender hepatosplenomegaly. Otoloscopy revealed a left secretory otitis media. A CT scan showed generalised cerebral oedema only and a scan of her chest showed cavitating lung lesions. After six days of intensive antibiotic therapy, she remained ill and developed

marked tenderness of the left internal jugular vein (IJV). A diagnosis of lateral sinus thrombophlebitis with extension to the IJV was made.

She underwent urgent middle ear and mastoid exploration. Secretory otitis media was confirmed and a ventilation tube was inserted. On opening the mastoid a normal air-cell system was seen with no evidence of infection. The lateral sinus was initially difficult to locate as the characteristic "blueness" was absent due to the thrombosis within. The middle and posterior fossae were needled and no pus was found. There was no perisinus collection of pus. The lateral sinus was exposed from the sinodural angle to the jugular bulb and large amounts of septic clot were removed until there was free flow of blood in both directions. The sinus was then repaired with a roof patch of temporalis fascia which was glued into place with fibrin (Tisseel). A decision was taken not to ligate the IJV unless further embolic phenomena occurred. She initially made a good recovery but two weeks later suffered a convulsion and a CT scan revealed a temporal lobe abscess. Stereotactic aspiration of the abscess yielded granulation tissue only and after prolonged antibiotic therapy, she made a complete recovery.

Several lessons can be learned from this patient:

The presence of embolic phenomena (e.g. cavitating lung lesions) in the presence of complicated acute otitis media should alert the clinician to the development of lateral sinus thrombosis. These developments may precede the appearance of a tender IJV.

The presence of a normal mastoid air-cell system seen at surgery does not exclude the presence of disease within the lateral sinus or indeed other intracranial structures.

Evacuation of septic thrombus from the sinus with the return of venous flow does not mean that the patient is cured. Vigilance should be maintained for some months later in case of the development of further intracranial complications such as a brain abscess.

Finally it is well to remember that although intracranial complications following acute otitis media are rare, they do still occur. Their prompt recognition and active treatment should prevent unnecessary fatalities.

Yours faithfully,

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Reference

O'Connell, J. E. (1990) Lateral sinus and thrombosis: a problem still with us. *Journal of Laryngology and Otology*, **104**: 949–951.