controversial and unsatisfactory though chemotherapy and steroids are the generally accepted methods used. Beier, Thatcher, and Lahey (1963) suggest the use of vinblastine sulphate, and this was the treatment in our two cases together with prednisone, as used by Hertz and Hambrick (1968) and Chantler, Milner, and Winterborn (1971).

Summary
Two cases of Letterer-Siwe disease presenting with ulcerating, necrotic gingivae are described.

We thank Mr. G. S. Hoggins for his dental care of these patients and Dr. A. H. Cameron for his interpretation of the histology.

References

P. R. Betts* and A. S. McNeish
Birmingham Children's Hospital and Institute of Child Health, Birmingham.

*Correspondence to Dr. P. R. Betts, Birmingham Children’s Hospital, Ladywood Middleway, Birmingham B16 8ET.

Treatment of Pneumothorax in the Newborn Infant

In the newborn infant, tension pneumothorax causes acute respiratory distress and unless air is aspirated without delay it can prove fatal. It is customary to treat this condition by inserting a catheter into the affected pleural cavity and attaching it to an underwater seal (Stahman, 1967). Various kinds of tube have been used for this purpose, e.g. intravenous cannulae, feeding tubes, etc., but each has its own disadvantage; some do not have side holes, others are narrow and block or kink easily. A larger gauge catheter can only be introduced after making a stab wound through the entire thickness of the chest wall. Nor is the underwater seal without problems. If the tube draining the pleural air is sunk too deep underwater (>2 cm) air will not drain until a high pressure builds up in the pleural space and continuous suction has to be applied to the bottle in order to prevent this. If the bottle is accidently lifted above the level of the patient, its contents will promptly syphon into the chest and could be lethal. Finally the underwater drainage bottle system is cumbersome, a serious handicap in a busy neonatal unit where space is at a premium.

The purpose of this paper is to draw attention to the availability of equipment which obviates these difficulties.

It has been our practice during the past year to drain pneumothoraces using an Argyle Thoracic Trocar Catheter size Fr. 12* which is custom-made with terminal and side holes and an x-ray opaque sentinel line. The catheter comes ready mounted on a trocar to facilitate its introduction through a small skin incision over an intercostal space. The catheter should be introduced deep enough to ensure that the side hole is within the pleural space and it is then secured to the skin by a stitch; if the side hole lies under the skin surgical emphysema develops. To the catheter a Heimlich Chest Drain Valve† (Heimlich, 1965, 1968) is attached. This is a one-way flutter valve made of rubber and enclosed in a clear plastic tube open at both ends. The catheter fits directly onto the valve and no adaptor is necessary. This valve has proved very efficient and functions equally well in the presence of fluid that may drain from the pleural cavity.

We have achieved excellent results by using the combination described above and the following case report illustrates this.

Case History

A female infant weighing 3840 g was born to a primigravida by spontaneous vertex delivery at term, 27 hours after rupture of membranes. The mother had been pyrexial and was receiving antibiotics. The Apgar score at one minute was 2 and so the baby was intubated and intermittent positive pressure ventilation started. Despite ventilation for 35 minutes, spontaneous respirations did not start and the colour remained

*Cat. number AR-2068, Sherwood Medical Industries Ltd.
The Argyle Tube is manufactured by the Brunswick Corporation (UK) Ltd., Health and Science Division, Worthing, Sussex, England.
†Cat. number 3460, Bard-Parker Company Inc., Rutherford, New Jersey, U.S.A.
The Heimlich Chest Drainage Valve is produced by Becton, Dickinson UK Ltd., York House, Empire Way, Wembley, Middlesex.
poor. Pneumonia acquired in utero was suspected, and the baby was attached to a mechanical ventilator. Chest x-ray taken at this stage showed bilateral pneumothorax (Fig. 1a). Argyle catheters size Fr. 12 were introduced into the pleural cavity on either side through midpoints between clavicle and nipple. A Heimlich valve was attached to each catheter (Fig. 2). The pneumothorax had disappeared and the lungs fully expanded by the following day (Fig. 1b). The baby made an excellent recovery.

It is suggested that drainage of tension pneumothorax using the above equipment should replace the less efficient and more cumbersome underwater seal method.

**Summary**

A technique for draining pneumothorax in the newborn is described. The equipment used, which is available commercially, has advantages over the more cumbersome underwater seal.

**REFERENCES**


**A. RAMACHANDRA and GEORGE RUSSELL**

*Aberdeen Maternity Hospital and Department of Child Health, University of Aberdeen, Aberdeen.*

*Correspondence to Dr. George Russell, Department of Child Health, University Medical Buildings, Foresterhill, Aberdeen AB9 2ZD.*

**Comparison of Pyrantel Pamoate with Other Anthelmintic Drugs**

Pyrantel pamoate (Combantrin) is a new single-dose anthelmintic agent, effective against infestations with *Enterobius vermicularis*, *Ascaris lumbricoides*, *Ancylostoma duodenale*, and *Necator americanus* in
Treatment of pneumothorax in the newborn infant.
A Ramachandra and G Russell

Arch Dis Child 1972 47: 464-465
doi: 10.1136/adc.47.253.464

Updated information and services can be found at:
http://adc.bmj.com/content/47/253/464.citation

Email alerting service
Receive free email alerts when new articles cite this article. Sign up in the box at the top right corner of the online article.

Notes

To request permissions go to:
http://group.bmj.com/group/rights-licensing/permissions

To order reprints go to:
http://journals.bmj.com/cgi/reprintform

To subscribe to BMJ go to:
http://group.bmj.com/subscribe/