The pubertal period presents considerable difficulties when assigning reference ranges, since a child may reach puberty earlier or later than may be anticipated. Results may occasionally be seen significantly outside the reference ranges without any apparent pathology. It may therefore be prudent for laboratories not to quote reference ranges for this patient group, especially if there is automated assignment of ranges. Clinicians could consider encouraging their pathology provider(s) to apply interpretative comments instead of possibly incorrect reference ranges. Provision of adequate clinical information to the laboratory will enhance the value of these comments.

Conclusion

Interpretation of laboratory results from paediatric patients may be made difficult by a number of factors. Where uncertainty remains, it may be advisable to refer further testing to a laboratory which receives relatively larger numbers of paediatric samples and which should consequently have more data and greater experience at interpreting the results.

References


Conflict of interest: none declared

Self-test questions

The following statements are either true or false (answers on page 131)

5. Automated reference ranges for biochemical tests may be inaccurate for paediatric patients.
6. Excessive squeezing of an infant’s heel to obtain a sample of capillary blood may increase the reported concentration of potassium.

Book review


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The latest Therapeutic Guidelines state that the respiratory diseases are largely unchanged but there have been new approaches to them. Since the last Respiratory edition in 2000, new drugs have been introduced and more effective delivery devices and management approaches have been developed. General practitioners require an ever-increasing knowledge base and access to comprehensive information. The Therapeutic Guidelines series are always extremely useful, and incorporate clear summary tables. This respiratory update is timely and welcome.

Given the high prevalence of asthma in Australia, it is highly relevant to have a thorough summary of asthma diagnosis and management. This topic is particularly well covered, including risk factor reduction, asthma severity classification and asthma management plans. General practitioners are commonly involved in managing long-term asthma and guidelines are provided. Clinicians will find the summary of treatment of acute asthma attacks in adults and children a useful reference.

The management of chronic obstructive pulmonary disease is well covered, outlines broad management strategies (such as addressing nutritional factors) and emphasises follow-up. The principles of oxygen therapy are outlined early in the book and in this section. Cough can be a problematic presentation and common underlying causes are discussed. Guidelines on conditions such as cystic fibrosis and pleural conditions are provided, and there is a very useful section on sleep apnoea which is increasingly being recognised.

It is important to refresh knowledge of pulmonary function tests regularly, and the section on these is easy to follow, assisted by diagrams. Fitness to fly and scuba dive are covered, as are respiratory drugs in pregnancy and breastfeeding. I would recommend this book as being vital for clinicians to update knowledge and have as a reference.

* Available from www.tg.com.au Phone 03 9329 1566