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Understanding Pediatric Heart Sounds

Steven Lehrer. Philadelphia: Saunders. 1992. Pp 230 + audio cassette. $38.95. ISBN 0-721623875.

Although I am a paediatric cardiologist, I have never really understood paediatric heart sounds. I was born into the subject in 1980 with an ultrasound machine attached to my right wrist and could not wait to dispense with the guesswork that auscultation seemed to entail. Now I wear my stethoscope only for decoration or to add a touch of old-fashioned authenticity for suspicious parents. The title of this publication seems quaint for the 1990s, at a time when technology has taken over from the stethoscope and a child with a complex heart malformation can be evaluated and surgically treated without the bell ever touching the chest.

Bereft of his portable echo machine, Lehrer has put together a package that is ideal for both undergraduates and postgraduates in paediatric training. The reasoning behind children's heart sounds and murmurs is laid out clearly and Lehrer is obviously a skilled, thoughtful, and experienced auscultator. I recommend especially the chapter on systolic murmurs to many of my consultant paediatric colleagues who remain unable to distinguish a classic innocent murmur from that of a ventricular septal defect. Many children arrive in our clinics having been referred for unnecessary echocardiograms. On several occasions I became concerned that the author had lost touch with modern terminology—eg, endocardial cushion defects are not commonly described as such nowadays, being referred to as atrioventricular septal defects. Also, to talk of surgical pulmonary valvotomy, when the established treatment for pulmonary stenosis for nearly ten years has been a balloon valvuloplasty, seems strange. There is a brief, if slightly naive, overview of some major heart malformations, but this is perfectly suitable for undergraduates.

The tape provides good examples of the different types of heart sounds and murmurs found in children. I was surprised that one of the most common, that of pulmonary stenosis, was not included. However, familiarity with the limited nature of possible diagnoses should dispel the panic often felt by undergraduates—and even, in some instances, postgraduates—when asked to auscultate a child's heart.

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Low Molecular Weight Heparin

T. W. Barrowcliffe, E. A. Johnson, D. P. Thomas. Chichester: John Wiley. 1992. Pp 205. £32.50. ISBN 0-471933244.

In 1916, a medical student named McLean discovered heparin whilst searching for a coagulant in livers of various animal species. Since then, heparin, a sulphated glycosaminoglycan that is extracted from bovine and porcine lung or intestine, has become a familiar anticoagulant. It is effective in the prevention and treatment of venous thrombosis and pulmonary embolism, the prevention of mural thrombosis after myocardial infarction, the treatment of patients with unstable angina and acute myocardial infarction, and the prevention of coronary artery reocclusion after thrombolysis.

From the mid-1970s onwards, research suggested that heparin fractions of low molecular weight might have advantages over standard heparin in anticoagulant regimens. The authors of this book, who are at the forefront of research into the development of low-molecular-weight heparin, recount their story well, from early physicochemical investigations in vitro, through extensive