GLOSSARY

ACE
Angiotensin-converting enzyme

SBP
Systolic blood pressure

episodes, whereas TOE was repeated in 49 (18.4%) cases. The mean number of examinations was 2.4 for TTE and 1.2 for TOE. Of the 127 episodes with definite endocarditis, diagnostic information was obtained from the first TTE in 27 (21.2%) cases and from the first TOE in 87 (68.5%) cases. Second and third examinations provided diagnostic information in 34 (26.7%) cases for TTE and 25 (19.7%) cases for TOE. The diagnostic contribution decreased as the number of repetitions increased, and no additional diagnostic information was obtained after the third TTE or TOE examinations.

The authors conclude that the data do not support the routine use of more than three TTE or TOE examinations in patients with suspected endocarditis. They note, however, that selected patients (e.g. those with cardiac prostheses and pacemakers) may benefit from further examinations, and that TOE should be the first imaging modality in patients with possible prosthetic-valve endocarditis.

Original article Vieira MLC *et al.* (2004) Repeated echocardiographic examinations of patients with suspected infective endocarditis. *Heart* **90:** 1020–1024

New procedure for atrial decompression *in utero*

Hypoplastic left heart syndrome (HLHS) with intact atrial septum (IAS) is associated with a particularly high mortality rate. This may be due, in part, to secondary anatomic changes in the lung arising from prenatal left-atrial hypertension. Marshall *et al.* hypothesized that decompression of the fetal left atrium might improve outcomes. On this basis, they have devised a method for creating an atrial septal defect *in utero*.

Procedures were performed at 26–34 weeks' gestation on fetuses diagnosed with HLHS and left-atrial hypertension, with either an intact ($n = 4$) or a highly restrictive ($n = 3$) atrial septum. Under ultrasonographic guidance and using transcatheter techniques similar to those used previously in neonates, attempts were made to create an interatrial communication. Briefly, a needle was introduced percutaneously from the maternal abdominal surface into the fetal right atrium. The atrial septum was then perforated and the new defect was dilated and maintained using an angioplasty balloon.

Perforation of the atrial septum was achieved in six fetuses but pulmonary venous flow reversal persisted. One fetus died following the septoplasty procedure and the remainder were liveborn at term, although four died as neonates. There were no maternal complications.

The authors conclude that the procedure is feasible and that, following further technical development, it may offer clinical benefits in HLHS with IAS.

Original article Marshall AC *et al.* (2004) Creation of an atrial septal defect in utero for fetuses with hypoplastic left heart syndrome and intact or highly restrictive atrial septum. *Circulation* **110:** 253–258

Managing hypertension in children

Addressing the demand for data on the treatment of hypertensive children, Li *et al.* have carried out a large pediatric study of the efficacy, safety and dose-response relationship of the ACE inhibitor fosinopril.

Following a 10-day screening period, children aged 6–16 years with hypertension or high-normal blood pressure ($n = 253$) were randomized to low (0.1 mg/kg), medium (0.3 mg/kg) or high (0.6 mg/kg) doses of fosinopril for 4 weeks. A 2-week randomized withdrawal period followed, in which patients continued on the same dose or received placebo. The final phase of the trial was a 52-week, open-label safety study (0.1–0.6 mg/kg fosinopril, with or without adjunctive hypertensive drugs).

The low, medium and high doses of fosinopril were equally effective in reducing SBP: target blood pressure was reached in 45%, 47% and 42% of children in the three groups, respectively, in week 4 of the dose-response phase. During the randomized withdrawal phase, the adjusted mean increase in SBP was statistically significantly higher in the placebo group than in patients on any dose of fosinopril (5.2 vs 1.5 mmHg, $P = 0.013$). Of 209 patients in the open-label period, 174 (83%) reached target BP and the majority of these children (85%) were in the low-dose group. The drug was generally well tolerated.