daunorubicin cardiomyopathy[7] was included; death from this cause is a known hazard of treatment. Many of the deaths could probably have been prevented by more effective medical or surgical management.

Once the high-risk groups have been recognized it becomes clear that sudden death is unusual in most children with mild heart disease. The low incidence of mild conditions in this large series is reassuring. There were a few patients with apparently innocuous diagnoses such as atrial or ventricular septal defect in the miscellaneous group, but without details of the individual case histories it is not possible to judge the severity of the abnormalities or the precise cause of death. Death during physical exertion is clearly a real hazard when there is severe outflow obstruction to the left ventricle.

Perhaps the most important finding is the negative one: the data confirm the view that children with mild rheumatic or congenital heart disease can be allowed unlimited physical activity and may participate vigorously in sports. One common cause of parental anxiety can be confidently relieved.

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Osteotomy for Arthritis of the Knee

Interest in the application of osteotomy to the treatment of arthritis of the knee was stimulated by the development of high femoral osteotomy for arthritis of the hip.[1 2] At each joint an operation aimed primarily at correcting deformity has been found to have an even greater value in relieving pain. At the tibio-femoral joint special mechanical considerations arise, for here deformity caused by asymmetrical arthritis can itself make the arthritis worse. Loss of articular cartilage on one side of the joint produces a concavity to that side, which increases the weight-bearing stresses on the worst-affected joint surfaces. Correction of deformity transfers the load back to the less severely affected condyles. The value of surgical correction of valgus or varus deformity in osteoarthritis or in late and quiescent rheumatoid arthritis has now been well established.[3-8] Good or excellent relief of pain can be expected in rather more than three of every four cases. Success depends partly on the precision with which the normal weight-bearing angle of the knee is restored.[5] Preoperative valgus or varus deformity can be assessed accurately only by radiographs taken when the joint is bearing weight. Lateral deformity, once so identified and measured, may usually be readily corrected by the resection of a wedge from the tibia, preferably at or above the level of the tuberosity.[9] Tibial osteotomy is less satisfactory for correcting more than a few degrees of flexion deformity and is inappropriate for lateral deformity if its application would produce a seriously oblique plane to the knee joint. Supracondylar osteotomy of the femur is then preferable, though this is more likely to decrease knee motion.

The value of osteotomy in arthritis of the knee without lateral deformity is less well established. There is evidence that relief of pain after osteotomy for arthritis of the hip is not only due to altered joint mechanics but also to changes in the venous drainage of the related bones.[10 11] If osteotomy of the knee relieves pain in the same way it might be expected that double osteotomy, dividing both tibia and femur, would be even more helpful. Experience has not so far borne this out. Double osteotomy has been applied without discrimination to knees with or without lateral deformity. The design of the experiment has not allowed a firm conclusion on the importance of dividing one bone or two in relation to correcting angulation. In the original report[12] in 34 of 57 knees the patients obtained excellent or good relief of pain after surgery. In a more recent careful (if again retrospective) survey of 65 operations,[13] in 41 the knee became free or almost free of pain though functional improvement was much less striking. Loss of movement was a disadvantage, particularly in the osteoarthritic knees, where it averaged 27° and was sometimes severe.

Strenuous efforts are now being made to develop a reliable prosthetic arthroplasty for the knee. Until such a solution is available arthritis affecting the knee and causing disabling pain which does not respond to simple palliatives, including correction of obesity, can sometimes be considerably helped by surgery. Procedures of established value include patellectomy for localized patello-femoral arthritis, the removal of loose bodies causing symptoms, and osteotomy for lateral deformity. Osteotomy in the absence of deformity is of less certain value, and any procedure requiring division of the femur incurs a risk of increased knee stiffness.

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Benign Hyperplasia and Cancer of the Prostate

Certain pathological changes in the prostate, notably benign hyperplasia and carcinoma, occur with increasing frequency as age advances. Estimates have indeed suggested that some degree of adenomatous hyperplasia may be expected in most men over 60, though it may not necessarily be clinically obtrusive nor in need of treatment. In the same way malignant disease, though rare before the age of 50, shows a rapidly mounting incidence throughout the following decades and eventually attains an unenviable position among male cancer mortality statistics. Furthermore, detailed histological studies of the ageing prostate have shown a high prevalence of latent carcinomatous foci rising, according to some estimates, to a figure of over 40% by the age of 75, though most fail to achieve morbid significance.

While little is known about the basic aetiology of these two conditions, their location and statistical parallelism have naturally aroused speculation as to a possible relation between