

pericarditis is active. Sometimes the pericarditis is present without any E.C.G. changes.<sup>5</sup>

About half the patients reported on by Kirk and Cosh also had rheumatoid lung or pleural lesions.<sup>5</sup> Pleural effusion is common, but pericardial effusion is rare. In the few cases in which pericardial effusion occurs the fluid closely resembles the straw-coloured non-viscous fluid found in the pleural cavity; typically it is high in protein but low in sugar. L.E. cells are found in the blood in a minority of patients,<sup>6</sup> but even then the diagnosis of rheumatoid arthritis as opposed to systemic lupus erythematosus is usually clear. To assess the incidence of rheumatoid pericarditis Kirk and Cosh made a prospective study of 100 inpatients with severe rheumatoid arthritis selected at random. They found it was 10%. But their patients had sufficiently severe disease to warrant admission to hospital, and so high an incidence would not be expected in patients outside hospital.

The prognosis of rheumatoid pericarditis is generally good. The condition appears to run a benign course, usually with rapid spontaneous resolution. Specific therapy does not prevent its onset or shorten its course once established. If pericardial effusion occurs, early aspiration is advised to prevent tamponade and to reduce the risk of later pericardial constriction. B. P. Harrold<sup>7</sup> reviewed 17 reported patients with rheumatoid pericarditis who had undergone pericardiectomy for constriction and noted that in only three did the interval between onset of arthritis and operation exceed five years. This suggests that if constriction is going to occur it is unlikely to do so in patients with arthritis of long duration. Rarely, heart failure may be the presenting symptom of rheumatoid pericarditis, and the onset of oedema in a patient with rheumatoid arthritis should prompt the doctor to consider this possibility.

## Children's Eyes

Errors of refraction are almost universal, and few of us attain old age without recourse to spectacles. Yet, though the refractive state of the eye is simply the product of physical variations in the eye's anatomy which admit an exact measurement, our knowledge of these measurements in substantial numbers of the population at different ages has been very incomplete. A recent comprehensive report by Arnold Sorsby and G. A. Leary<sup>1</sup> is welcome not only because of the information it provides on the patterns of refractive changes in growing children but also because it helps to clear away some of the myths that are still being reported about the prophylaxis and "treatment" of short-sightedness.

The infant's eye is normally hypermetropic (long-sighted), and as the eyeball grows in length the hypermetropia decreases. The eye thus becomes more normal-sighted or even short-sighted until growth comes to an end by the age of 14. Between the ages of 3 and 14 the eye becomes about 1.2 mm. larger. But some 60% of the potential decrease in hypermetropia (or increase in myopia) that this elongation could be expected to produce is eliminated by a simultaneous reduction in the converging power of the cornea and lens, so

that the resultant change in refraction is little more than 1 dioptre. And, as most infants are more than 1 dioptre hypermetropic, only exceptionally does this trend produce a frank myopia, and that of quite a low order. In about 28% of children a greater elongation of the eyeball during this growth period does cause a further shift towards myopia than can be compensated for by a slight additional decrease of the power of the cornea and lens. The change in cornea and lens is in part the direct sequel to this elongation and would itself tend to neutralize some of this adventitious myopia. The authors of the report found that bodily heights and weights were unrelated to the refraction at the beginning and end of the period of observation, and there were no obvious sex differences in these developments.

As the authors had shown in an earlier report,<sup>2</sup> the refraction and its components are genetically determined. And this, they state, must be assumed to apply also to the anomalous axial elongation and paradoxical changes in the cornea and lens. The provision of correct spectacles will thus have no influence on this predetermined refractive change<sup>3 4</sup> any more than on other organic disorders of the eyeball.

## Caribbean Food and Nutrition Institute

Christopher Columbus made his first landfall in the Caribbean in October 1492 at an island in the Bahamas which he piously named San Salvador. Believing he had reached Asia, he imposed on posterity the confusing practice of calling the people of the New World "Indians" and the Caribbean islands the "West Indies." The area was at that time inhabited by the gentle Arawaks and the fierce Caribs, who gave us the word "cannibal." The Arawaks were soon exterminated by the Europeans who followed Columbus; the Caribs held out somewhat longer, and a few thousand survive today.

In the sixteenth and seventeenth centuries the islands were appropriated by European powers—the English, French, Dutch, and Spanish. They became sugar islands, devoted to sugar plantations worked by negro slaves captured in West Africa and carried across the Atlantic in the dreadful circumstances of the middle passage. After emancipation in the nineteenth century the sugar industry declined because the ex-slaves hated the sight of the sugar cane, which was being grown in increasing quantities in other parts of the tropics, and the sugar beet, efficiently cultivated in the temperate zone, began to rival the cane as a source of sucrose. During a long period of economic depression the Caribbean territories faded out of history, becoming of little importance to their European owners. Partial economic recovery came only recently, with the development of new industries such as bauxite manufacture, and the discovery, by wealthy Canadians and Americans, that the Caribbean offers an escape from winter blizzards and has lovely scenery. The tourist industry has boomed. During the last decade many of the Caribbean territories have become independent members of the United Nations.

This, roughly, is the setting of the Caribbean Food and Nutrition Institute, established in 1967. The institute has centres in Jamaica and Trinidad, each located in the campus of the University of the West Indies. At present its activities

<sup>1</sup> Sorsby, A., and Leary, G. A., *Medical Research Council. Special Report Series*, 1970, No. 309.

<sup>2</sup> Sorsby, A., Sheridan, M., and Leary, G. A., *Medical Research Council. Special Report Series*, 1962, No. 303.

<sup>3</sup> Morgan, O., *British Medical Journal*, 1970, **1**, 175.

<sup>4</sup> Gilkes, M. J., *British Medical Journal*, 1970, **1**, 758.

<sup>1</sup> *Journal of Tropical Pediatrics*, 1968, **14**, 52.

<sup>2</sup> Waterlow, J. C., Cravioto, J., and Stephen, J. M. L., *Advances in Protein Chemistry*, 1969, **15**, 131.