

at the age of thirteen the ratio is one hernia in seventy-seven children. From this age to twenty-one, there is a rapid increase among males so that there is now one hernia in thirty-two, due, no doubt, to the fact that during these years boys learn their trades, indulge in rough athletic sports and over-exert themselves. In females the increase in the proportion of hernia does not take place until the child-bearing period when there is a great increase in the number.

It follows from this that without surgical treatment 75 per cent. of all herniæ heal spontaneously before the child has reached 12 or 13 years, even if no herniæ formed during the period between the ages of 6 and 13, which, of course, we all know is not the case. Bull and Coley's records show that out of over 15,000 adults with hernia, less than 5 per cent. have been ruptured since childhood. Hence it follows that much more than 75 per cent. of all herniæ in children will heal spontaneously, or at least without surgical treatment, if proper conditions are secured.

In a paper written by T. C. Martin he shows that during the development of the child certain changes take place which tend to a natural cure of hernia. He points out that in the enlargement of the pelvis, the parietal peritoneum increases at the expense of the mesentery; the latter is thus shortened, and so prevents the entrance of the intestine into the inguinal or crural canals. A displacement of the internal abdominal ring and the widening of the emunctory canals also help in curing the rupture. A faulty development of the abdominal walls and the natural defect resulting from the descent of the testicles in the male, particularly when the processus vaginalis remains patent, must be considered most potent predisposing causes in the formation of herniæ. Macready places this hereditary tendency or defect in 25 per cent., and Malgaigne in 33 per cent. of all cases.

Beside anatomic reasons for the prevalence of hernia in children, Eccles, Langton, Ochsner and others have pointed out that the factor of increased intra-abdominal pressure is a most important cause. This may be due to habitual constipation, requiring great straining during defecation; primosis, causing strain during micturition; severe coughing, and lastly, intestinal disturbances from unsuitable food, resulting in flatulency and