

an unusual length and mobility of the sigmoid flexure which would allow intermittent kinking and pocket formation. Dilatation, such as occurs in these cases, is of a higher degree than that following the most severe grades of chronic constipation.

The clinical feature which distinguishes the abdomen in cases of congenital enlargement of the colon from the swelling in rickets and tuberculous peritonitis is the striking prominence of large intestinal coils and the remarkable play of their peristaltic movements. No other disease causes such extensive dilatation and hypertrophy of the colon. The amount of fluid the large intestine may hold is almost beyond belief. In Concetti's case, a boy, aged eight years, passed in five days 10,660 grams of feces. In Formad's case of the "balloon man," the colon and contents weighed 47 pounds. The form of the abdomen is important; it is long and bulging, the lower part of the thorax being distended, so that the costal margins form almost a straight line.

Duval, in 30 cases, found the age at death to be as follows: First few days, 2 per cent.; first six months, 9 per cent.; from sixth to twelfth month, 7 per cent.; from first to fifth year, 23 per cent.; from eighth to fifteenth year, 11.5 per cent.; at an older age, 16 per cent. The cause of death was obstruction in 11 cases (3 acute and 8 chronic); acute colitis in 10 cases; surgical interference in 4 cases; pneumonia, once; cardiac collapse, once; cachexia, once; sudden death, once; unknown cause, once.

Pathologically, there is reason to consider the dilated and hypertrophied intestine a congenital condition, although other views are urged. Treves thinks mechanical obstruction is the only important factor; Fenwick says that a congenital disposition to constipation due to spasm of the sphincter, with resulting fecal obstruction and gas formation, may be enough to explain the enlargement. Such changes, however, never occur in simple constipation, while the lesions have been found not only at birth but in a seven months' fetus—too early for mechanical obstruction to have played a part. Duval distinguishes total ectasia, when the whole large intestine is involved except the rectum, from segmentary dilatation, when only a part is affected. The former occurred in 32.5 per cent. of his collected cases, the latter in 67.5 per cent. The sigmoid flexure was involved in nearly all cases; next in frequency were the transverse colon and descending colon. The rectum was seldom involved, and the small intestine slightly in but 2 cases. In the region of dilatation the intestinal walls are always hypertrophied. All the coats except the serosa are involved, especially the muscularis mucosæ and circular muscles. Ulceration of the mucous membrane is very common and often leads to perforation. Of 34 autopsies reviewed by Duval ulceration was present in 11. Operative procedures undertaken to relieve the condition have usually been without benefit. Treves' successful resection of the whole descending colon, sigmoid, and rectum is a unique result. Osler's case was benefited by a colostomy.

**The Classification and Pathogenic Significance of the Orthostatic Albuminurias.**—TEISSIER (*Revue de médecine*, April 10, 1905, p. 233) holds that there are three groups of cases of orthostatic albuminuria, that is, albuminuria induced by the mere assumption of the erect posture by the individual. These are in brief as follows:

1. *True Orthostatic Albuminuria.* The albumin appears very soon after assuming the erect posture—often in a quarter of an hour. There

is no history of previous infectious diseases, nor is the albuminuria dependent upon dietetic influences, mental depression, or general fatigue. Assumption of the erect posture seems to be the only and essential etiological factor. It diminishes in the sitting and disappears in the recumbent posture. The writer states that the subjects show indications of infantilism. There is vascular hypoplasia; the heart is small; the blood pressure low, and the body weight below normal. The individual is often very nervous, and there may be a marked neuropathic family history. The form of albumin present is serum albumin. Serum globulin is absent. As there is usually an abundant mucous cloud, nuclealalbumin is demonstrable. Casts do not occur, and formed elements are scanty. Vigorous exercise does not increase the albuminuria. In fact, it usually causes it to diminish, and in some instances to disappear.

2. *Mixed Orthostatic Albuminuria.* In this group the postural albuminuria is discovered in persons in whom a definite history of one or more acute infections is obtained and in whom it is believed to be due to actual organic changes in the kidney. The individuals look healthy, and the albuminuria is slower in its development than in the previous type. It makes its appearance most often between ten and twelve in the morning. There may be headache, but no nervous manifestations. The blood pressure is somewhat increased, and there may be some cardiac enlargement and palpitation. Tessier thinks that the majority of the published cases belong to this group. Serum globulin is present in addition to serum albumin.

3. *Associated Orthostatic Albuminuria.* The albumin is slower in making its appearance after assuming the erect posture than in the true variety. The abnormal conditions with which it is associated are dilated stomach, enteroptosis, and movable kidney. Globulinuria often occurs with the albuminuria. Among the associated factors are cerebral fatigue, digestive disturbances, and, above all, habitual mental depression, the relief of which often leads to disappearance of the albuminuria.

The writer is interested especially in arriving at an explanation for the occurrence of the true orthostatic albuminuria. His theory is a purely nervous one. He believes that the circulation in the kidney during the period of albuminuria is analogous to that which exists in Raynaud's disease. When the erect posture is assumed a reflex nervous impulse is transmitted to the nerves supplying the renal arteries, causing contraction and spasm of the latter. There is also a determination of blood to the lower extremities. These two factors lead to lowered blood pressure in the kidneys. Later the vascular renal system gives place to dilatation of the renal arteries, and there is renal congestion, as in the second stage of Raynaud's disease. The latter condition permits the diffusible elements of the blood, including the serum albumin, to pass through the capillaries of the glomeruli and albuminuria results.

**Relation between Blood Pressure and Pulse Pressure and the Output of Albuminuria in a Case of Orthostatic Albuminuria.**—ERLANGER and HOOKER (*The Johns Hopkins Hospital Reports*, 1904, vol. xii. p. 346), in their "Study of Blood Pressure and of Pulse Pressure in Man," devote a section to the effect that variations in the circulatory conditions have on the output of albumin in a case of orthostatic albuminuria. Their experiments lead them to conclude that the albuminuria is depend-