



Fig. 1.—Infants with phocomelia (courtesy of Dr. Lenz).

Fig. 2.—Older infant with phocomelia.

TABLE 3.—OTHER MALFORMATIONS OCCURRING IN 203 CASES OF PHOCOMELIA

	Number
Pylorospasm.....	2
Duodenal stenosis.....	3
Duodenal atresia.....	3
Esophageal atresia.....	¹ 2
Anal atresia.....	3
Cardiac abnormalities.....	17
Anencephaly.....	2
Microcephaly.....	3
Eye malformations.....	1
Nasal obstruction.....	1

¹ Courtesy of Dr. W. Lenz, Hamburg, Germany.² Doubtful.

instances, usually in severe cases the internal organs are affected. Malrotation of the gut occurs with duodenal stenosis and anal atresia (Fig. 6). Asplenia may occur and the musculature of the uterus may be so affected as to make a bihorned uterus. A variety of cardiac malformations have also been reported but these did not fall into any specific pattern. Thus hypoplasia of the aorta, defects of the auricular and ventricular septa, all forms of transposition of the great vessels, tetralogy of Fallot, and pulmonary stenosis have all been reported. The frequency with which the various abnormalities occur in Dr. Lenz's series are shown in Table 2. The variety of other malformations is shown in Table 3. Pfeiffer and Kosenow (4) reported extensive family studies on 34 children. They found no similar traits among the relatives and no consanguinity among the parents. Chromosomal analysis of 12 patients showed no chromosomal aberration either in the number or form of the chromosomes. Four of 6 pairs of dizygotic twins had the same type of malformation but the twins were not equally affected. These investigators thought that the causative factor was exogenous and acted during