INTRODUCTION

Congenital duodenal atresia could generally be diagnosed in the neonatal period with double-bubble X-ray findings in babies with feeding difficulties and vomiting.

Six babies with feeding difficulties were diagnosed with duodenal atresia in the last two years by typical X-ray findings in our center (Figure 1); one of them also had Down syndrome. This diagnosis was made prenatally in four babies, though it was suspicious in two, because of the absence of fetal double-bubble sign and minimal polyhydramnios during pregnancy (Figure 2).

Three of these six babies were born prematurely (33-36 weeks of gestation). Four of them were boys and two were girls. The diagnosis of duodenal atresia was made in all six babies before they attained an age of 10 days. A typical double-bubble appearance was reported in them, which was verified during surgery. In all of them, the diagnosis was also verified by radiopack studies (Figures 3).

In two term babies, distal intestinal air was also shown in examinations performed later; one of them had duodenal atresia in the other small opening of duodenal web. All surgical findings from the six babies are given in Table 1 and Figure 4. The types of duodenal atresia are shown in Figure 5.

Four of the babies were the product of the first pregnancy and two were that of the second pregnancies; one of them was born as a twin baby. Since prematurity was documented in three of the babies, the correlation between duodenal atresia and prematurity should be taken into consideration as was reported previously.

None of the mothers had any signs or symptoms that could be related to their babies congenital disorders, except polyhydramnioses in four mothers.

Five of the six babies did not have any problem in growth and development and feeding. The sixth baby was operated then she developed sepsis, now she was cleared from sepsis, getting well. She is in ICU.

DISCUSSION

Several varieties of intrinsic and extrinsic congenital lesions can cause complete or partial obstruction of the duodenum (1). The double-bubble sign without distal air is diagnostic of a complete obstruction (2). In patient 1,
there was a web with minimal opening but there was no air distally. He was operated on the second day of life. Therefore, air might not have transmitted distally. He was a preterm baby at 33 weeks of gestation. The two parts of the duodenum did not have any difference in width.

In patient 4, there was no any distal air on the first day. We operated him on the seventh day of life. There was a web with minimal opening. The difference in width between the two parts of the duodenum was prominent. He was the term baby.
If some intestinal air is seen distally, obstruction may be overlooked at the duodenal level due to the presence of a duodenal web. During surgery, no difference in width between the two parts of duodenum may hide the web. Mild relief can be seen at the web line (Figure 4). If a baby presents with vomiting, an incomplete duodenal obstruction would be suspected and a contrast study would be necessary.

**REFERENCES**
