



Detection of Prune-belly syndrome by ultrasound in the first trimester

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INTRODUCTION/BACKGROUND

Prune-belly syndrome is a rare disease with marked male predominance consisting of a complex association of malformations characterized by the triad: aplasia or hypoplasia of the abdominal musculature, dilations of the urinary tract, and bilateral cryptorchidism.

OBJECTIVES/AIMS

This work will highlight the importance of antenatal first trimester ultrasound in screening this malformation in order to establish an early diagnosis to get a better prognosis.

METHODS

In this case report, we will present a case of an early diagnosed prune belly syndrome suspected by the first trimester ultrasound later confirmed by foetal pathology.

RESULTS

A 36 year old woman, with no medical or surgical history, gravida 2 para 0, both pregnancies are from a non-consanguineous relation. The first pregnancy was terminated at 20 weeks because of trisomy 18. The patient was referred to our department for further evaluation.

Ultrasonography at our hospital, at 13 weeks, confirmed an enlarged fetal bladder.

A Chorionic villus sampling resulted in a normal karyotype.

A second ultrasound was performed at 16 weeks showing an aggravation of the megacystis resulting in a bilateral hydronephrosis and an oligohydramnios.

Given the prognosis of renal function compromise, the parents opted to terminate the pregnancy.

The postmortem examination at 18 weeks has shown a male foetus with dilated urinary tract, kidney dysplasia and abdominal wall muscular layer defect.

CONCLUSIONS

Although the pregnancy in this case was terminated upon parental request, this study suggests the importance of the early ultrasound to diagnose the disease in order to better manage prune-belly syndrome.

Figure 1 : ultrasound performed at 13 weeks showing a megacystis with no other abnormalities



Figure 2 ultrasound performed at 16 weeks showing aggravation of megacystis.

