

Congenital unilateral hydrocele: a sonographic finding

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Case Report

Abstract

Foetal hydrocoele is a condition diagnosed in utero in male foetus. It is characterised by a half-moon fluid image around the testis. We describe a case of ultrasound diagnosis of hydrocele in a woman at 35 weeks of gestation. Diagnosis was confirmed at birth, distinguishing this from the transient cases usually encountered. This finding during a routine obstetrics scan further highlights the relevance of ultrasound to obstetricians and neonatologists.

Keywords: Foetus, congenital, hydrocoele, testis, ultrasound

Hydrocèle unilatérale congénitale: une constatation échographique

Rapport de cas

Resume

hydrocèle foetal est une condition diagnostiquée in utero au fœtus de sexe masculin. Elle est caractérisée par une image en demi-lune de fluide autour du testicule. Nous décrivons un cas de diagnostic échographique de l'hydrocèle chez une femme à 35 semaines de gestation. Le diagnostic a été confirmé à la naissance, en distinguant ce des cas transitoires habituellement rencontrés. Cette découverte au cours d'une obstétrique de routine scanner met également en évidence la pertinence de l'échographie pour les obstétriciens et les néonatalogistes.

Mots-clés: Foetus, congénitale, hydrocèle, testis, échographie

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INTRODUCTION

Foetal hydrocoele is characterized by a fluid-filled space within the scrotum next to the testes. It appears in the third trimester in male foetus, as fluid frequently accumulates within the patent processus vaginalis during descent of the testis and epididymis (1,2).

Hydrocoeles are categorized as communicating or non-communicating. Incomplete closure of the processus vaginalis result in communicating hydrocoele that is connected to the peritoneal cavity (3). Non-communicating hydrocoeles are not associated with patency of the processus vaginalis (4). However, another variant known as the hydrocoele of the spermatic cord arises if the middle part of the processus vaginalis remains open (5).

Hydrocoeles are identified prenatally with sonography in the third trimester of pregnancy. Typical sonographic features are given by a typical “half moon” fluid image surrounding the testis (6). Majority of hydrocoele resolve spontaneously in utero or during the first year of life and require no treatment (7).

There is a dearth of literature on ultrasonic detection of hydrocoele in utero. We described a case of hydrocoele which did not resolve during the course of foetal development.

Case Report

A 34 year old woman at 35 weeks of gestation, gravida 2, para 2 underwent routine sonographic examination at the Ultrasound Unit of Crystal Specialist Hospital, Lagos, Nigeria. Her foetus demonstrated a half-moon shaped sonoluscent (fluid-filled) area over the right testis which was diagnostic of a hydrocoele (Figure 1). The hydrocele remained constant in size and persisted for the remaining part of the pregnancy. She was delivered at term of an apparently healthy baby without inguinal hernia but with a unilateral hydrocele.

DISCUSSION

The diagnosis of different types of congenital malformations has been greatly aided by ultrasonography. The advances made in sonographic imaging technology have facilitated the accurate characterisation of foetal genitalia. In this case, we presented our encounter with unilateral foetal hydrocoele which is the non-communicating type as the volume remained constant in utero. The hydrocele was not resolved during pregnancy but instead persisted into neonatal period and so is different from the

transient type which resolved in utero spontaneously as described by Petrikovsky and Shmoys (8).

This detection further sheds light on the dynamics of hydrocoele and underscores the importance of ultrasonography to obstetricians and neonatologists.

Conflict of interest: No conflict of interest was declared.

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Figure 1. Sonogram showing hydrocele in foetal testis. Observe the half-moon fluid image around the testis indicated by arrow. T= testicular tissue; P= Penis