Abstract

Objective: Reporting a series of cases which were evaluated by conventional echography and 3D eXtended imaging (3DXI) and reviewing the pertinent literature regarding the most frequent 2D and 3D ultrasound images and complementary diagnostic methods. Materials and methods: Three cases are reported which were evaluated in the Maternal-Fetal Medicine Unit at the Clínica Colsubsidio Orquídeas (a reference centre) which attends a high obstetric risk pregnant population from the contributory health insurance system. None of the cases were associated with findings of malformations and they all had favorable evolution. A literature review was made of Pubmed, Ebsco, Ovid and Proquest databases from 1980 to 2011 based on the following key words: fetal cholelithiasis, fetal biliary gallbladder, fetal biliary mud, prenatal diagnosis; review articles, case reports, diagnostic validity/accuracy studies or cross-sectional studies published during the same period were included. Results: 25 of the 41 articles found were included: 9 case series, 9 reviews and 7 diagnostic accuracy studies. Cholelithiasis was usually diagnosed during the end of the second or third trimester of pregnancy during fetal growth and welfare ultrasound exam. Diagnosis must be postnatally corroborated. Complications associated with a diagnosis of cholelithiasis during postnatal life have not been documented. Cases usually have good prenatal and postnatal evolution without future sequelae and usually have spontaneous resolution. Only one study referred to nuclear magnetic resonance as being a postnatal option. DMR and 3DXI-type methods were not referred to in the literature. Conclusion: Fetal cholelithiasis is an incidental finding; even though diagnosis is usually made by 2D echography, 3D eXtended imaging could provide a new diagnostic tool as a complementary alternative in prenatal diagnosis.

Keywords
Fetal cholelithiasis, fetal biliary gall bladder, fetal biliary mud, prenatal diagnosis, literature review, complementary diagnostic method.