Objective
To evaluate the referral indications for fetal echocardiography at our hospital and to determine which indications were associated with prenatal detection of congenital heart disease (CHD) in our obstetric population.

Methods
Retrospective analysis of the clinical records of pregnant women who underwent fetal echocardiography at our hospital from January 2012 to December 2013. Demographic data, referral indication, fetal echocardiography findings and pregnancy outcomes were collected. Patients were excluded if a viable fetus was not found at examination. In cases of multiple echocardiograms during one pregnancy, the diagnosis from the final echocardiogram was used. The referral indication was divided in two groups: (1) the "DGS group" – when fetal echocardiography was ordered according to the criteria established by the Portuguese health department (DGS) and this included major causes (family, maternal, fetal) and minor causes (other motifs), and (2) the "non-DGS group" – which referral was not consistent with DGS criteria.

Results
During the study period, 1024 fetal echocardiograms were performed for 661 pregnant women. 20 of the fetuses were twins and there were 1 set of triplets. The median maternal age was 32 years (range, 15-45 years) and the median gestational age at the first echocardiographic examination was 27 weeks (range, 17-40 weeks). The sample included 457 women (69.1%) in the “DGS group” and 204 (3.9%) in the “non-DGS group”. The most common indication in the “DGS group” for referral (23.8%) was maternal age ≥35 years without chromosomal study by invasive testing. 33 cases (5%) with cardiac anomalies were detected by fetal echocardiography: 28 structural congenital heart disease (CHD), 4 rhythm anomalies and 1 pericardial effusion. In the CHD sub-group, 3 positive cases were missed on follow-up, 5 cases had medical termination of pregnancy and 8 positive cases continue to be followed up with the paediatric cardiologists. Fetal echocardiography performed because of abnormal cardiac views on ultrasound screening (4, 2%) yielded by far the most cases of CHD (detection rate, 53.8%). A similar detection rate (7.7%) was found among women referred with a family history of CHD, maternal diabetes, amniotic fluid anomalies, extracardiac malformations, abnormal nuchal translucency and fetal arrhythmia.

Conclusion
All the CHD cases fulfilled the referral criteria established by DGS. The prevalence of CHD may be underestimated due to the sample size and the loss of positive cases in the follow-up. Screening ultrasound is the most effective tool to identify fetuses that would benefit from fetal echocardiography.