Fetal congenital anomalies among consanguineous pregnant marriages
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Objective
To assess the pattern of fetal congenital anomalies among consanguineous marriages and compare it to non-consanguineous ones.

Methods
This cross-sectional study included 300 pregnant women with fetal congenital anomalies; 150 with consanguineous marriages and 150 with non-consanguineous marriages. They were recruited from the Fetal Medicine Unit at Cairo University Hospital. A structured interview was used to collect data composed of 4 main parts: socio-demographic characteristics, medical history, past and present obstetric history. An ultrasonographic examination was done for anatomical scanning of the fetus to screen for the presence of congenital anomalies in addition to fetal biometry.

Results
Multiple anomalies were detected in 79 fetuses (52.7%) of the consanguineous group and 52 fetuses (34.7%) of the non-consanguineous group (p = 0.002). Multiple anomalies were more frequent among first degree consanguinity (p = 0.001). Central nervous system was the most commonly affected system followed by the musculoskeletal system in both groups. Anomalies of CNS, face, cardiovascular system were more common in consanguineous marriage group. Congenital anomalies in a previous fetus were more common in consanguineous group and (29.3 vs. 10.7%, p < 0.001). The most common types of congenital anomalies among fetuses of consanguineous marriage group were cleft palate, bilateral cleft lip, hydronephrosis and unilateral cleft lip.

Conclusion
Consanguinity was associated with anomalies involving different body systems, mainly the CNS. Multiple-system malformations were significantly associated with first degree consanguineous marriage. Consanguineous couples are recommended to have genetic counseling, premarital examination and screening about hereditary diseases.