

TESTICULAR MIGRATION: WHEN DOES IT START THE TRANSITION OF THE TESTIS THROUGH THE INGUINAL CANAL? STUDY IN 169 HUMAN FETUSES DURING THE 2ND GESTATIONAL TRIMESTER



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Introdução e Objetivo

Testicular migration is a complex process divided in intra-abdominal and inguinoscrotal stages. The aim of this study is to evaluate the testicular position in human fetuses during the 2nd gestational trimester and try to evaluate the moment of the beginning of transition of the testis through the inguinal canal.

Método

The position of testes in 169 human fetuses (338 testis) aged between 12 and 24 weeks post-conception (WPC) was analyzed. Testicular position was classified as: a) Abdominal, when the testis was in the abdominal cavity up to the inner ring (Figure 1A); b) Inguinal, when it was found between the inner ring and the outer ring (Figure 1B – Left testis -LT) and c) Scrotal, when it was inside the scrotum. We performed the measurements of the weight (g), crownrump length (CRL) (cm) and fetal foot length (mm) to estimate the fetal age. Means were statistically compared using linear regression analysis and the Qui-square test (p<0.05).



Resultados

The fetuses had weight ranging between 30g and 944g, and CRL ranging between 7cm and 27.5cm. We observed 305 testes (90.23%) situated in abdomen and 33 (9.87%) in inguinal canal. The linear regression analysis (RL) by the Pearson method showed that there is a significant correlation when comparing the age of the fetus with its weight and CRL, both in the total period analyzed. When we compared the 102 fetuses (204 testes) between 12 and 19 WPC (only 3 testes-1.47% were situated in inguinal canal - the first in a fetus with 17 WPC) with the 67 fetuses (134 testes) between 20 and 24 WPC (30 testes - 22.38% situated in inguinal canal), a significant difference was observed (p=0.0002).

Conclusão

The twentieth gestational week seems to be the crucial period for the intensification of inguinoscrotal stage of testicular migration in human fetuses

Referências

Favorito La – Translational research appliedt to pediatric urology – Springer 2023