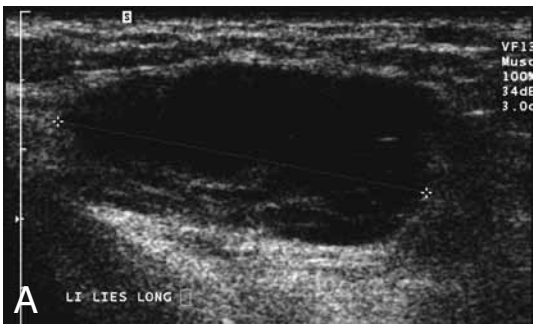
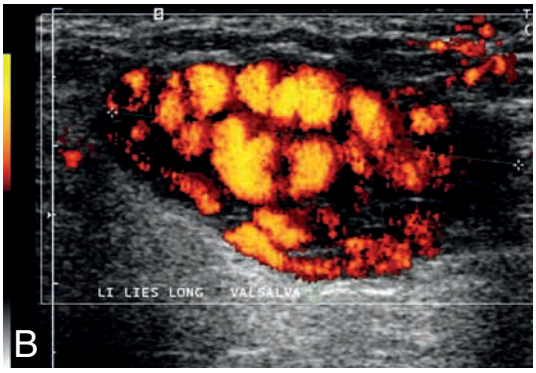
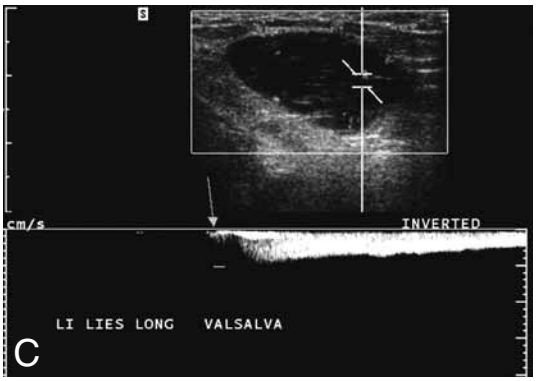
JBR–BTR, 2011, 94: 92.

IMAGES IN CLINICAL RADIOLOGY







Round ligament varicocele

J. Heymans[1], F.M. Vanhoenacker[2,3], F. Vankelecom[1]

A 24-year-old pregnant woman (at 25 weeks gestation) was referred to our department because of a painless swelling in the left groin which she was feeling for one week. The swelling was more apparent in the upright position and when coughing. The swelling was reducible. Ultrasound demonstrated an anechoic structure with intralesional septa at the left inguinal area (Fig. A, longitudinal ultrasound image). The lesion augmented with the Valsalva manoeuvre and in standing position. Power Doppler confirmed the presence of venous flow (Fig. B). Inverted venous flow was seen after Valsalva (Fig. C, arrow).

Based on the imaging findings the presumptive diagnosis of round ligament varicocele was made.

The lesion was managed with watchful waiting and resolved completely in the postpartum period. In her second pregnancy the lesion recurred, again with complete resolution after delivery.

Comment

Round Ligament Varicocele (RlV) is a rare clinical entity with only sporadic reports in the medical literature. It presents as a progressive groin swelling associated with pregnancy early in the third trimester with spontaneous regression soon after delivery. Progesterone-mediated venous smooth muscle relaxation, a raised cardiac output causing increased venous return from the limbs and leading to engorgement of venous tributaries, and progressive pelvic venous obstruction by the gravid uterus, contribute to RLV formation during the pregnancy. The lesion arises from the veins draining the round ligament and the inguinal canal. The incidence is unknown, but it is probably underdiagnosed. The correct diagnosis can be established by Doppler ultrasound, showing a prominent venous plexus (bag of worms) in the inguinal canal, with dilatation and flow augmentation during Valsalva manoeuvre. The differential diagnosis includes inguinal hernia, lymphadenopathy, lipoma, abscess, haematoma, pseudoaneurysm, AV malformation, cyst of the canal of Nuck and thromboplebitis. The clue to correct diagnosis on ultrasound is the presence of intralesional venous flow. As RLV is usually a painless selflimiting condition, the preferred treatment consists of a wait-and-see policy. Rarely painful complications may occur due to rupture or thrombosis of the varicose round ligament. Prompt surgical exploration is mandatory in the latter clinical scenario.

In conclusion the diagnosis of RVL should lie considered when a groin lump is encountered in the second half of pregnancy. Doppler ultrasound allows a quick and reliable diagnosis, avoiding unnecessary surgical exploration.

Department of 1. Gynecology, 2. Radiology, AZ Sint-Maarten, Duffel-Mechelen, 3. Department of Radiology, Antwerp University Hospital, University of Antwerp, Edegem, Belgium.