

years The gold standard diagnostic modality for uterine fibroids appears to be gray-scale ultrasonography, with magnetic resonance imaging being a close second option in complex clinical circumstances.

In a study investigating the relationship between ultrasound appearance, blood flow, and angiogenic gene expression in fibroids (F), peribroid (PM), and distant myometrial (DM) tissues. They hypothesized that angiogenic gene expression would be increased in tissues and participants that showed increased blood flow by Doppler ultrasound. The study was performed using Doppler ultrasound to measure blood flow prior to hysterectomy, with subsequent tissue samples from the F, PM, and DM being investigated for angiogenic gene expression. Overall, PM blood flow (measured as peak systolic velocity [PSV]) was higher than F blood flow, although significant heterogeneity was seen in vascularity and blood flow between different Fs and their surrounding myometrium. They did not find any correlation between PSV and any other clinical or molecular parameter in their study.

#### KÖ-34 [15:15]

##### Gestasyonel trofoblastik hastalıklar ve Doppler USG

Ateş Karateke

*Zeynep Kamil Kadın Hastalıkları ve Doğum Eğitim ve Araştırma Hastanesi, Jinekolojik Onkoloji Kliniği, İstanbul*

Gestasyonel trofoblastik hastalıklar (GTH), plasental koryonik villuslardan kaynaklanan tümörlerdir. Ultrason incelemesi, semptomları olan hastalarda tanıya yardımcı olması açısından standart uygulama haline gelmiştir. Vajinal kanaması ve hızlı uterus büyümesi olan,  $\beta$ -hCG değerleri belirgin olarak yüksek hastalarda GTH'dan şüphelenilir. Ayrıca, hiperemesis, anemi, preeklampsi ve hipertiroidizm de eşlik edebilir. Pelvik ultrason, tipik olarak uterin kaviteyi dolduran, kistik komponentli, solid ve hiperekoik kitle gösterir. Tek lutein kistlerinin varlığı, tanıyı kuvvetlendirir. Doppler inceleme-sinde, kitle çevresinde düşük rezistanslı, yüksek sistolik ve diastolik frekanslarda ve yüksek hızlarda akım saptanır. Düşük dirençli arteriyel akım, myometriuma uzanıyorsa, invazyondan şüphelenilir.

İnvazif molar gebelikte, trofoblastlar, hipervaskularite gösterir. Uterin spiral arterler, genişlemiş alanları doğrudan besler. Düşük dirençli ve yüksek hızlı fonksiyonel arteriovenöz şantlar, anormal uterin hipervaskulariteyi oluşturur. Rezistiv indeks (RI), 0.5 veya altındadır (normali: 0.7). Tepe sistolik indeks ya da en yüksek hız, 50 cm/sn'den fazladır.

Sonuç olarak, GTH'da belirgin yüksek  $\beta$ -hCG seviyeleri ve USG tanıyı büyük ölçüde sağlar. Doppler, bu tanıyı konfirme etmede yardımcı olabilir. Bunun yanında, invaziv hastalığın

tanınması, tedavi etkinliğinin değerlendirilmesi, rekürens saptanması, Doppler ile mümkündür.

#### KÖ-35 [16:00]

##### Ultrasonographic markers of aneuploidy in second trimester

Firas Abdeljawad

*Makassed Hospital, Mount of Olives, Jerusalem*

Chromosomal abnormalities occur in 0.1% to 0.2% of live births, and the most common clinically significant aneuploidy among live-born infants is Down syndrome (trisomy 21). Other sonographically detectable aneuploidies include trisomy 13, 18, monosomy X, and triploidy. Second-trimester ultrasound scan detects 2 types of sonographic markers suggestive of aneuploidy. Markers for major fetal structural abnormalities comprise the first type; the second type of markers are known as "soft markers" of aneuploidy. These latter markers are non-specific, often transient, and can be readily detected during the second-trimester ultrasound. The most commonly studied soft markers of aneuploidy include a thickened nuchal fold, rhizomelic limb shortening, mild fetal hydronephrosis, echogenic bowel, and echogenic intracardiac focus and choroid plexus cyst. There is a great deal of interest in the ultrasound detection of aneuploidy, as evidenced by the large number of publications in the literature on this topic.

Unfortunately, studies evaluating the significance of the soft markers of aneuploidy vary widely and show contradictory results. We review the most common ultrasonographic soft markers used to screen aneuploidy and discuss ultrasonographic technique and measurement criteria for the detection of soft markers. We also review the clinical relevance of soft markers to aneuploidy risk assessment and evidence-based strategies for the management of affected pregnancies with each of these markers in light of current literature.

#### KÖ-36 [16:30]

##### Umbilical cord abnormalities

Nebojsa Radunovic

*Belgrade, Serbia*

The umbilical cord develops in close association with the amnion and serves a vital function during intrauterine fetal development. Evaluation of umbilical cord entities and function is an integral part of every sonographic examination. It includes cord measurements (diameter of cord vessels as well as estimation of cord length), analysis of cord anatomy (cord coiling, vessel number), estimations of cord abnormalities capable of impending blood flow and cord function (Cord Doppler).