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### BİRİNCİ TRİMESTER ULTRASONOGRAFİSİ

Gebeliğin ilk trimesteri, son adet tarihini (SAT) takip eden ilk 13 haftalık periyodu kapsamaktadır. Konsepsiyon genellikle SAT'den iki hafta sonra gerçekleştiğinden gestasyonel yaşın SAT'ne göre hesaplanması terminoloji karmaşasının önüne geçmek için önemlidir [1]. Birinci trimester 3 evreye ayrılabilir [2]:

- Konsepsiyon Evresi (0-3 hafta)
- Embriyonik Evre (6-10 hafta)
- Fetal Evre (10-12 hafta)

Birinci trimesterin ilk günlerinde mikroskopik boyutlarda olan embriyo ancak **5. gebelik haftasından itibaren transvajinal ultrasonografi (TVUS) ile görülebilir hale gelir** [3].

#### Klinik Endikasyonlar [4]

- İntrauterin gebeliğin tespiti
- Ektopik gebelik şüphesinin değerlendirilmesi
- Vajinal kanamanın değerlendirilmesi
- Pelvik ağrının değerlendirilmesi
- Kardiyak aktivitenin varlığının tespiti
- Şüpheli mol hidatiformun değerlendirilmesi

### Anatomi

Uterus, pelvis içinde, anteriorda mesane, posteriorda ise rektum ile komşu şekilde retroperitoneal alanda yer alır. Arteriyel beslenmesi hipogastrik arterin büyük bir dalı olan uterin arter ve aortadan çıkan ovaryan arter ile gerçekleşir. Venler arterlere eşlik eder. Arka ve üst duvarı duvarı visseral periton ile örtülü olan uterusun anteriorundaki peritoneal boşluğa anterior cul de sac, posteriorundaki peritoneal boşluğa ise posterior cul de sac ya da Douglas boşluğu adı verilir. Bununla birlikte uterusun her iki yanında visseral peritonun yaptığı katlantılar broad ligamenti oluşturur. Erişkinde çoğunlukla antevort ve antefleks şekilde bulunan uterus yaklaşık 8 cm boyunda, 5 cm eninde ve 4 cm ön-arka uzunluğundadır. Uterusun boyutları multiparite ile artarken, postmenopozal dönemde azalır (**Resim 9.46**).

Endometrium uterin kavitenin iç yüzünü döşer. İçerisinde glandüler epitelyum ve stroma yapılarını bulunduran endometriyum menstrüel siklus boyunca gerçekleşen hormonal değişimlerin etkisi ile kalınlığı periyodik olarak artıp azalır. Zigotun endometriyuma implantasyonu sonrası uterin ve ovaryan arterler dıştan içe doğru miyometriyum içinde ilerleyerek arkuat arter adını

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ve gereğinden fazla düzeyde pulse tekrarlama frekansı (pulse repetition frequency, PRF) ayarlanması gibi yanlış pozitifliğe yol açabilecek teknik durumlar da mevcuttur [102]. Venöz ve lenfatik drenajın ortadan kaldırılması, over dokusunda ödemin artmasına ve overin arteriyel beslenmesinin bozulmasına yol açabilir. Doppler USG ile arteriyel ve venöz dolaşımın olmadığına gösterilmesi ile tanı koyulabilir. Arteriyel Doppler akımının varlığında venöz Doppler akımının olmamasının ovaryan torsiyonu tanımada %94 pozitif prediktif değeri vardır [94]. Bundan dolayı venöz akım Doppler sinyalinin alınmaması torsiyon tanısı açısından çok daha değerli bir bulgudur.

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