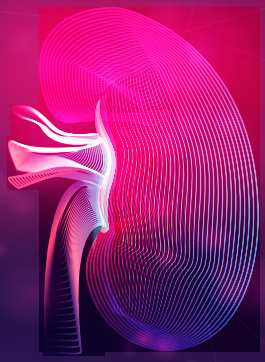

BÖLÜM 1

GEBELİKTE RENAL FİZYOLOJİ

Sharon MAYNARD
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Gebelikte, gelişmekte olan fetüsü destekleyen, dolaşım, böbrek ve toplayıcı sistemlerde değişiklikler olur. Üriner toplayıcı sistemde fizyolojik genişleme olur. Sistemik vasküler direncin azalmasına, kalp debisinin artmasına, renin anjiyotensin-aldosteron sisteminin aktivasyonuna ve plazma hacminin genişlemesine yol açan sistemik vazodilatasyon vardır. Renal kan akımı ve glomerüler filtrasyon hızı artar ve bunun sonucunda serum kreatinin konsantrasyonunda düşüş meydana gelir. Protein, glukoz ve amino asitlerin idrarla atılımı artar. Elektrolit ve asit-baz değişiklikleri, kronik respiratuar alkaloz ve hiponatremiyle birlikte hafif hipoozmolariteyi içerir. Bu bölüm, gebelikteki bu fizyolojik değişikliklerin mekanizmalarını ve klinik sonuçlarını özetlemektedir.

ÜRİNER SİSTEMDEKİ DEĞİŞİKLİKLER

Gebelikte her iki böbreğin boyu yaklaşık 1–2,0 cm ve hacmi yaklaşık %30 oranında büyür [1]. Histolojik olarak nefron sayısında bir değişiklik yoktur, ancak renal vasküler ve interstisyel hacmin ikisi de artar. Gebe kadınların %80-90'ında toplayıcı sistemde genişleme vardır. Renal pelvis, kaliksler ve üreterler etkilenir. Tipik olarak sağ renal pelvis ve üreter soldan daha fazla etkilenir (Şekil 1.1) [2]. Bu fizyolojik hidronefroz ve hidroüreter, genellikle gebeliğin maternal hidronefrozu olarak adlandırılır. Dilatasyon, gebeliğin 6-10. haftası gibi erken bir tarihte ortaya çıkabilir. Bu değişiklikler postpartum 6-12. haftaya kadar devam edebilir [2]. Bu sürece çeşitli hormonal ve mekanik faktörler katkıda bulunur. Progesteron üreter tonusunu ve peristaltizmini azaltır [3]. Ek olarak, prostaglandin E2 gebelik sırasında artar ve sonuçta üreteral peristaltizmi inhibe edebilir ve üreteral dilatasyona neden olur [3]. Büyüyen uterus üreterlerin yer değiştirmesine ve sıkışmasına neden olabilir [4]. Ovaryan damarlar sağda pelvik, ke-

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