

## AMNİON SIVI DİNAMIĞI ve PATOLOJİLERİ

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### AMNİON SIVI

Amnion sıvısı (AS), fetüsü çevreleyen ve tüm gebelik boyunca fetüsü koruyan, içeriği ve hacmi gebelik dönemlerine göre değişen bir sıvıdır. Rengi berrak olmakla birlikte mekonyum ile boyanınca önem kazanmaktadır. Fetüsü travmalardan koruyarak, umbilikal kordu da kompresyonuna engel olmaktadır. AS'nın fazlalaşması (polihidroamnios) veya azalması (oligohidroamnios) klinik olarak önem taşımaktadır. Embriyolojik gelişim aşamasında, AS miktar artışına en fazla maternal plazma katkı sağlamaktadır. Bu katkı sırası ile fetal membranlar ve plasental-membrandan geçen ozmotik su akışı sayesinde gerçekleşmektedir (1).

### AMNİYON SIVI HACMI VE FİZYOLOJİSİ

AS; fetüs gelişimini destekleyerek fetal hareketlerin kısıtlanmasını önlemektedir. AS'nın yetersiz veya fazla olması fetüs ve yenidoğan için morbidite ve mortalite sebebi olarak yorumlanmaktadır. AS hacmi yaklaşık olarak 10. haftada 20 ml, 22. haftada 630 ml ve 28. haftada ise 770 ml kadardır. Üçüncü trimesterde ise yaklaşık olarak 800 ml'dir. 8-12. haftalarda haftalık AS artış

hızı ortalama 8 ml iken, 13. haftada 25 ml, 22. haftada da 60 ml'dir. AS artış hızındaki en büyük değişkenlik 32-33. haftalarda izlenmektedir. Fetal ağırlık 22. haftadan 39. haftaya kadar yaklaşık 7 kat artmasına rağmen ortalama ASV de aynı kalmaktadır. AS volümü (ASV) ortalaması 22-39. haftalar arası değişmeden kalmaktadır. ASV'ü 39. haftada azalmaya başlamakta, 41. haftadan sonra ise azalmakta ve ortalama 500 ml'ye kadar düşmektedir (2). Termde ASV'ü 500 ile 1200 ml arasında değişiklik gösterebilmektedir (3). 41. haftadan sonra AS haftalık %33 civarında azalır ve postterm gebelikte oligohidroamnios oluşur (4).

Gebeliğin ilk dönemlerinde birkaç haftada AS içerik bakımından fetalekstraselüler sıvıya benzerlik göstermektedir. Fetal idrar üretimi 8. ile 11. haftalar arasında başlar ancak 2. trimesterde ASV'nün ana bileşeni haline gelmektedir. Bu nedenle ölümcül böbrek hastalığı olan fetüslerde oligohidroamnios 2. trimesterden önce meydana gelmez. Fetal ciltten su transportu, gebeliğin 20-24. haftaları arasındaki keratinizasyon süreci tamamlanana kadar devam etmektedir (5). Gebelik ilerledikçe AS'nın osmolaritesi ve sodyum içeriği azalır. Bunun nedeni fetal idrar ve izotonik fetal akciğer sıvısı sekresyonudur.

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