

## NUTCRACKER SENDROMLU HASTAYA ENDOVASKÜLER STENTLEME

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### GİRİŞ

Sol renal ven (Sol RV)'nin superior mesenterik arter(SMA) ve aort arasındaki sıkışması ilk olarak 1950'de El Sadr ve Mina tarafından tanımlanmıştır. (1) Vena cava inferior (VCI) aortun sağında olması dolayısıyla sol renal ven sağ renal vene göre daha uzundur. Sol adrenal bez, sol gonadal (ovaryan veya spermatik ), üreter , ikinci ve bazı kişilerde üçüncü lomber venler sol RV ' e boşalır. Sol RV ise inferior vena kavaya boşalmadan önce arkasında aort , önde SMA olmak üzere aralarından geçmektedir. Nutcracker sendromu diyebilmek için sol RV'nin sıkışmasının gösterilmesinin yanında hastanın semptomatik olması gerekmektedir. Eğer hasta semptomatik değilse Nutcracker fenomeni olarak adlandırılır.

Nutcracker sendromu preaortik ve retroaortik tiplere ayrılmıştır. Preaortik NCS; sup. mesenterik ile aort arasında, retroaortik NCS; önde aort ve arkada omurga arasında sol RV'nin sıkışması anlamına gelir. Sirkumaortik NCS de kombine bir varyanttır. Sol RV iki dala ayrılıp hem aortun önünden hemde arkasından geçer.

NCS'nin kesin prevalansı bilinmemektedir. Erken çocukluktan 70 yaşına kadar, birinci dekat ve ikinci dekat pık yapmak üzere her yaşta görülebilir.(2)

Bası öncesinde yükselen basınç NCS'nun kliniğini oluşturan patofizyolojiyi tetikler. Bu basınç sonucunda renal kalikslerde, üreter veninde, sol adrenal bez

veninde, gonadol venlerde dilatasyon olur. Dilatasyon sonrasında süreç devam etmesi durumunda erken dönemlerde kollateral oluşum geç dönemde de gonadol venlerden geriye doğru pelvik venöz ağ ile IVC'a boşalım retrograd venöz dönüş olarak gerçekleşir.

### ETYOLOJİ

SMA aorttan daha dar bir açıda (<35°) çıktığında (en sık neden)

Sol RV anormal derecede yüksek bir seyir izlediğinded

Pankreas kanseri

Para aortik lenfadenopati

Retroperitoneal tümör

Abdominal aort anevrizması

Overriding testis arter

Aort ve SMA arasında strangüle fibrolenotik dokua,b,c

Sol renal pitoz ( sol RV nin aort üzerinde gerilmesine sebep olur) e

Lordoze (visseral proptoz SMA ve aort arasındaki açığı azaltır)

Retroperitoneal ve mesenterik yağın azalmasıf,g

Gebelikte renal damara uterus baskısıh duodenal interpozisyon(3)

Menard et al.a,(4), Pastershank et al.b,(5), Neste et al.c,(6), Kurklinsky et al.d,(7), Shokier et al.e,(8), Wendel et al.f,(9), Venkatachalam et al.g,(10), Zhang et al.h,(11)

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