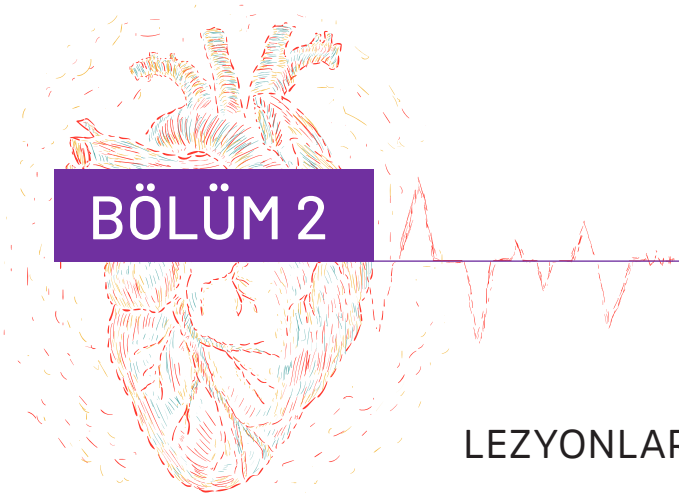

BÖLÜM 2

KORONER BİFURKASYON LEZYONLARINDA OPTİMAL ANJİOGRAFİK GÖRÜNTÜLEME

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1.Giriş

Koroner bifurkasyon lezyonları (KBL), son yıllarda girişimsel kardiyoloji alanında artan teknolojik ilerleme ve operatör tecrübesi ile birlikte giderek artan bir öneme sahiptir.

KBL kompleks anatomik yapısının yanı sıra damar tortüoz yapısı, kalsifikasyon, trombüs içeriği ve benzeri faktörler ile oldukça karmaşık ve değerlendirmesi zor lezyonlar olarak karşımıza çıkmaktadırlar. Bu yüzden girişimsel kardiyologlar arasında giderek artan oranda yapılan perkütan koroner girişim (PKG) öncesinde KBL'nin anjiografik olarak değerlendirmesi oldukça önem kazanmaktadır. Yapılacak girişim öncesindeki optimal değerlendirme ile stentleme stratejisine doğru karar verebilme ve işlemde oluşabilecek komplikasyon ve zorlukların yönetimi daha kolay hale gelecektir.

2.Koroner Bifurkasyon Anatomisi

Koroner arterlerin dallanma bölgelerindeki yapı düzensiz kenarlı geometrik şekillere benzer **(fraktal yapı)** ve bu yapıdaki akış dinamikleri kanunları bifurkasyon girişimlerinde de geçerlidir. Bu kanunlar, bifurkasyon girişimlerinde kılavuz araç olarak kullanılır (1). Koroner çatallanma fraktal geometrisinin ölçekleme yasaları, sıvı dinamiği simülasyonlarının optimal koşullarını belirlemek için perkütan koroner müdahaleler için bir kılavuz araç olarak önerilmiştir. Burdan yola çıkarak koroner bifurkasyon anatomisini değerlendirmek için özelleşmiş kantitatif koroner analizler (QCA) geliştirilmiştir (2-5). Koroner dallanma alanlarındaki damarların çap ve dinamiklerini ortaya koymak için daha önceki bölümde bahsedilen birtakım matematiksel formüller ortaya konulmuştur. Finet, Muray ve Huo - Kassab kanunlarına göre KBL de proksimal ana damar (PMV), distal ana damar (DMV) ve yan

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9. Sonuç

Sonuç olarak, bifurkasyon lezyonlarının geometrik yapısının tanımlanması klinik olayları öngörmede yardımcı olur. Ayrıca, BA'sı koroner shear stresi ile birlikte bifurkasyon bölgesinde ateroskleroz patogenezi ile ilgilidir. QCA ve KBTA'daki 3B ölçümler, BA'nın doğru değerlendirilmesi için 2B QCA'dan daha uygundur. Daha geniş bir BA'nın daha fazla stent malappozisyonu ve YD ostiumunda sık görülen klinik olaylarla ilişkili olabilecek akış bozukluğu oluşturması muhtemeldir. Karina kayması, PMV ve YD'nin merkezi çizgileri arasında daha dar bir açı ile bir çatallanmada meydana gelmesi muhtemeldir; ancak YD oklüzyonu, DMV ile YD arasında daha geniş açı olan bir bifurkasyonda görülür. PKG sırasında, her bir koroner vasküler bifurkasyonun uygun anjiyografik açılarda görüntülenmesi hem teknik hem de klinik sonlanım açısından hayatidir.

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