

15. BÖLÜM

KALP RİTİM HASTALIKLARI HAYVAN MODELLERİ

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Normal sinüs ritmi (NSR), vena cava superiorun sağ atriuma bağlandığı yerde sağ atriyumun lateral duvarının posteriorunda bulunan sinüs nodundan temel alan ritimdir. Sinüs nodu ise crista terminalisin medialinde sinüs nodu arterinin çevrelediği hücrelerden meydana gelir. Depolarizasyon hücrelerin iç membran potansiyellerinde meydana gelen değişikliklerden dolayı oluşur ve istirahat halinde bu membran potansiyelleri sabit seyrederek. Sağlıklı bir bireyin sinüs nodu dakikada 60 ile 100 atım arasında uyarı çıkarabilmektedir. Bu da bizim kalp hızı olarak adlandırdığımız durumu meydana getirir. Kalp atımının 60 altında olması bradikardi 100 üzerinde olması ise taşikardi olarak adlandırılır. Kalbin elektriksel aktivitesinin daha iyi anlaşılabilmesi için elektrokardiyografi (EKG) ile elektriksel monitörizasyon şarttır. Bu elektriksel aktivitenin EKG'ye yansımaları; P dalgası, QRS kompleksi, T dalgası olarak ta adlandırabileceğimiz dalga paternleri ile gösterilir (1). Sağlıklı bireylerde p dalgası normal genişlikte ve konfigürasyonda olur ve her p dalgasını mutlaka QRS kompleksi, her QRS kompleksini de T dalgası takip eder (1 ,2).

Aritmi; normal atriyoventriküler iletim esnasında meydana gelebilen her anomalidir. Aritmiler taşiaritmi, bradiaritmi, supraventriküler, ventriküler olarak birçok gruba kategorize edilebilir. Bu gruplandırmada lokalizasyon ve mekanizma büyük önem arzeder. His bandı bu lokalizasyonda kritik öneme sahiptir. His bandı altındaki aritmiler; ventriküler aritmiler, his bandı üzerindeki aritmiler ise supraventriküler aritmiler olarak isimlendirilir. EKG'de QRS genişliğine etkieden bu lokalizasyon sayesinde; bu gruplama dar QRS' li taşikardiler (supraventriküler aritmi) ve geniş QRS' li taşikardiler (ventriküler aritmiler) olarak da isimlendirilebilir. Günlük klinik pratiğimizde bu tip ritim anomallilerine sık rastlanmak-

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tařıkardi ve ventriküler fibrilasyon meydana gelir (65). Genetik alıřmalara raęmen VT modellemelerinde en ok kullanılan yntem; kardiyovasküler hastalıklar arasında en sık rastlanan iskemi ile VT oluřturma modelidir.

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