BÖLÜM 26

KAS METABOLİZMASI

Elif ÖZKÖK

26.1. Önemi

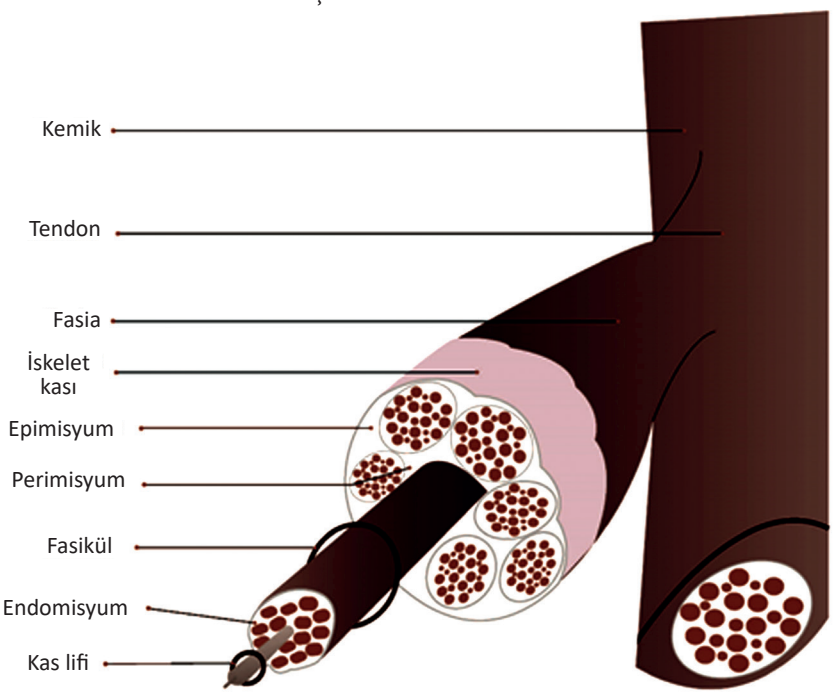
Kas dokusu, vücut ağırlığının yaklaşık %40-50 'sini oluşturan kasılma özelliğine sahip en büyük dokudur. Kas dokusu başlıca vücut şeklinin ve postürün (duruşun) sağlanmasında, hareket, kasılma-gevşeme ve ısı üretiminde görevlidir. Bütün bunlar kas hücrelerinin uyarılabilir olması, yani sinir sisteminden aldıkları uyarıları iletebilmeleriyle gerçekleşmektedir. Bu işlevleri yerine getirebilmesi ise besinlerden sağlanan kimyasal enerjiyi mekanik enerjiye çevirmesiyle gerçekleşmektedir.

26.2. Kasın Yapısı

Kas dokusu yaklaşık olarak %72-78 su, %19-20 protein, %3 lipit ve %1 glikojenden oluşan; ipliksi şekilde çok sayıda kas hücresinin düzenli şekilde biraraya gelerek kas demetlerini oluşturduğu bir yapıdır.

Vücudumuzdaki her kas, lif veya fibril olarak isimlendirilen silindirik yapıda kas hücrelerinin binlercesinin biraraya gelmesinden oluşmaktadır. Her kas lifinin üzeri "Endomisyum" denen konnektif doku ile sarılmıştır. Yaklaşık 150 lif bir araya gelerek lif demetlerini (fasikül) oluştururlar. Bu demetlerin üzerini saran konnektif doku ise "Perimisyum"adını alır. Fasiküllerin bir araya gelmesiyle iskelet kası oluşur; kasın üzerini de Epimisyum adı verilen konnektif doku sarar (Şekil 26.1).

Bir tek kas lifi hücresi "Sarkolemma" adı verilen hücre zarıyla çevrelenmiş olup, "Sarkoplazma" denen intrasellüler sıvı içinde birbirine paralel olarak yerleşmiş yüzlerce "Miyofibrilden " oluşur.



Şekil 26.1. Kemik kas bağlantısı ve iskelet kasından enine kesitle altbirim ve konnektif doku düzenlenmeleri.

26.7. Kaynaklar

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