

1. Bölüm

İSKEMİ REPERFÜZYON HASARI VE MEKANİZMASI

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1.1. İskemi Reperfüzyon

İskemi, bir dokunun normal işlevi için ihtiyacı olandan daha az kan ile beslenmesidir. İskemi süresinin artmasıyla, etkilenen dokularda yapısal bütünlük kaybı ile karakterize geri dönüşü olmayan yaralanmalar oluşmaya başlar ve hücre ölümü gerçekleşir. Doku hasarının olmaması için kan akımının hızla yeniden sağlanması gerekir. Reperfüzyon olarak adlandırılan bu olay, hücre işlevleri için gerekli olan oksijen ve besin ihtiyacını yeniden sağlayarak iskemik bölgeden metabolitleri uzaklaştırır. Reperfüzyon aynı zamanda hasarlı hücrelerdeki yaralanmayı şiddetlendirebilir ve yeni hücrelerin hasarlanmasına sebep olabilir. Bu durum, kalp, akciğer, böbrek, bağırsak, iskelet kası ve beyin dahil olmak üzere birçok organda meydana gelebilir ve bu süreçte oluşan metabolitler kan dolaşımı yoluyla uzak organlara gidebilir. Yani, sadece iskemik organın kendisini değil, aynı zamanda uzak organlarda sistemik hasara neden olarak çoklu organ yetmezliğine yol açabilir. Bir organa kan akımının kısıtlanması ile başlayan ve kan akımının yeniden sağlanması ile meydana gelen hücresel hasar ve/veya organ yetmezliği ve/veya ölümden oluşan olaylar bütününe iskemi reperfüzyon (İ/R) hasarı denir (1).

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