

Ultrasonografi Altında Yapılan Girişimlerde Sedasyon

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Ultrasonografi (USG) sadece radyologların kullandığı bir cihaz olmaktan çokmuş, neredeyse tıp alanında her branşta ihtiyaç duyulan bir teknoloji haline gelmiştir. Günümüzde steteskopun yerini alıp almayaçağı tartışılan USG anestezi uygulamalarındaki yerini her geçen gün sağlamlaştırmaktadır. Gerçek zamanlı görüntü veren, kolay ulaşılabilir bir cihaz olması nedeniyle sadece görüntüleme amacıyla değil birçok girişim sırasında da kullanılmaktadır (1).

Yüksek frekanslı ses dalgaları ile görüntü elde etmek için kullanılan bir tetkik yöntemi olan USG ile organ ve yapılar değerlendirilmektedir. Ultrasonografi cihazının prob bölümünde yer alan transduserda piezoelektrik (elektrik akımını, mekanik basınç dalgalarına dönüştürme) özelliği göstergen kristaller, yüksek frekanstaki ses dalgaları [2-15 MHz (1 Mega Hertz=1 milyon titreşim/sn)] ile yapısal değişikliğe uğrarlar. Gönderilen ses dalgalarının farklı yoğunluktaki doku ve organlar tarafından absorbe edilmesi, kırılması veya yansıtılması ile farklı dönüşlerinin sağlanması ve bunun da bilgi işlem ünitesinde işlenerek görüntülerin oluşması temel mekanizmadır. Radyasyon kullanılmaması, bilinen kalıcı bir zararının olmaması ve gerçek zamanlı görüntü elde edilmesi en önemli üstünlükleridir. Uzun zamandan bu yana radyologlar tarafından kitle biyopsileri, apse drenajı gibi işlemlerde kullanılmasının yanında nefrostomi takılması, kist hidatik aspirasyonu, yumurta (oosit) toplama gibi işlemler için de kullanılarak diğer uzmanlık alanlarının da pratiğine girmiştir. Teknolojinin ilerlemesiyle endobronşiyal endoskopik olarak da tanı ve tedavi amaçlı kullanılmaktadır.

Tedavi amaçlı eş zamanlı iğne aspirasyonları hastalarda ağrılı uyarulara neden olmakta ve istemsiz hareketler operatörlerin işlem kalitesini bozmaktadır. Bu yüzden hem hasta konforu ve memnuniyeti hem de operatörün rahatlığı için sedasyon uygulamaları bu işlemlerin daha etkin ya-

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