ONKOLOJİK TEDAVİ ÖNCESİ FERTİLİTE PREZERVASYONU

17. BÖLÜM

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GİRİŞ

Kanserler günümüz dünyasında önemli bir sağlık sorunudur ve kalp hastalıklarından sonra ikinci en yaygın ölüm nedenini oluşturur. (1) 2010 yılında Amerika Birleşik Devletleri'nde yaklaşık 713.220 kadına kanser teşhisi konacağı tahmin edilmekte iken 2020 yılında Amerika Birleşik Devletleri'nde tahmini 1,8 milyon yeni kanser vakası ve 606,520 kansere bağlı ölüm beklenmektedir. (2) 2020 yılı itibari ile, epidemiyolojik veriler Birleşik Devletler de kadın kanserlerinde insidans olarak birinci sırada en sık meme kanser (%30) gelmektedir. Sırasıyla, Akciğer (%12), Kolon-rektum (%8), Uterus Korpus (%7), ve Troid kanserleri (%4) olarak ilk 5 sırayı almaktadır. Over kanserleri sıklık olarak ilk on içinde yer almasa da tüm kansere bağlı ölümlerde %5 ile beşinci sırada yer almaktadır. (2) Bu sayısal artış yanında, ileri tedavi yöntemlerinin gelişmesi ile de sağ kalım oranlarında da artış sağlanmıştır. Buna göre artan sayıda kadın, gonadotoksik onkolojik tedaviden kaynaklanan kısırlık riskiyle karşı karşıyadır.

Çocuklarda, ergenlerde ve genç yetişkinlerde kanser insidansı 1970'lerden bu yana hafif bir artış göstermekle beraber, 0-19 yaş arası hastalarda ölüm oranları düşmeye devam etmektedir. Çocukluk çağı kanserleri için mevcut 5 yıllık genel sağkalım tahminleri %83›ü aşmaktadır (çoğu hematolojik malignite için yaklaşık% 90), bu da artan bir yetişkinin hayatta kalan popülasyonu anlamına gelmektedir. Çocukluk çağı kanseri olan kadın hastalar için vaat, yumurtalık nakli ve in vitro folikül olgunlaşmasına yönelik atılan adımlarda yatmaktadır. (3,4)

Sistemik lupus eritematozus gibi onkolojik olmayan hastalıkların tedavisi için gonadotoksik ajanlara maruz kalan hastalar, endometriozis nedeniyle ameliyat olanlar ile Turner sendromu ve frajil-X premutasyonu gibi genetik bozuklukları

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Yeni Fertoprotektif Ajanlar

Kemoterapiye bağlı folikül kaybının en son teorisi, büyük folikül apoptozuyla eş zamanlı olarak kemoterapinin aynı zamanda uykuda olan folikül büyümesinin aktivasyonunu tetiklediğini göstermektedir.

Mevcut araştırmalar, hayvan modellerinde hem folikül kaybını azalttığı gösterilen hem de anti-apoptotik özelliklere sahip ajanlara (imatinib, sfingosin-1-fosfat, tiroid hormonu T3, granülosit koloni uyarıcı faktör ve tamoksifen) odaklanmaktadır. Bu ajanların aynı zamanda PI3K / PTEN / AKT folikül aktivasyon yoluna etki eden bir bağışıklık modülatörü olan AS101 ve AMH (Anti-Müllerian Hormon) gibi folikül aktivasyonunu önleyen moleküler yapılarda olduğuna inanılmaktadır. Bu ajanların klinik uygulanabilirliği yalnızca fertoprotektif kapasitelerine değil, aynı zamanda potansiyel etkileşimleri ile kanser tedavisinde de kullanılabilirliğine dayanmaktadır. (90,91)

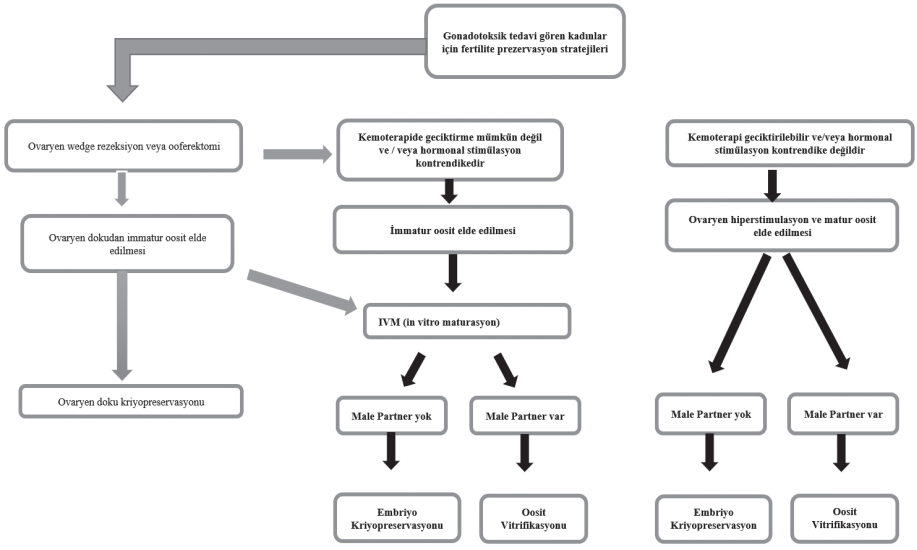

Figure 1

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