

## Bölüm **30**

# KRİYOPREZERVASYON YÖNTEMLERİ

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## GİRİŞ

Overlerin yaşlanması ve alınan sitotoksik tedaviler kadınlarda fertiliten kaybının en sık sebebidir. Malignite ve kronik hastalıklar için kullanılan bazı tedaviler, kâlıcı olarak üreme fonksiyonlarını durdurabilir. Kanser tedavilerindeki artan kür oranları fertiliten prezervasyonu' nun önemini arttırmıştır. Günümüzde fertiliten prezervasyonu için birçok seçenek vardır. Fertiliteyi korumak üzere belirlenmiş kriyoprezervasyon teknikleri; embrioların ve gametlerin dondurulmasını içerir. Bunlar embriyo kriyoprezervasyonu, oosit kriyoprezervasyonu, overyan doku kriyoprezervasyonu, oositlerin ve overyan dokunun in vitro kültürü, sperm kriyoprezervasyonu ve testiküler dokunun kriyoprezervasyonu olarak sayılabilir. Bu tedavileri düşünen hastaların fertiliten koruma seçenekleri ile ilgi danışmanlık almak için hızlı bir şekilde yönlendirilmeleri gereklidir. Uygun ön tedavilerin planlanması ve müdafahesi ile gelecekte biyolojik ebeveynlik elde edilmesi mümkün görülmektedir..

## FERTİLİTE PREZERVASYONU İÇİN KİMLER ADAYDIR?

Gonadotoksik tedavi veya cerrahi düşünen ve gelecekteki fertilitesini korumak isteyen herhangi bir hasta, kriyoprezervasyon teknikleri için adaydır. Postpubertal dönemdeki çocuklar ve kanser hastalığı olan ve/veya gonadotoksik tedavi gerektiren tıbbi hastalıkları olan yetişkinler geleneksel olarak fertiliten danışmanlığı için bilgilendirilmelidirler.

*BRCA* gen mutasyonu taşıyıcılarına ilişkin çalışmalar, bu kadınlarda yumurtalık yaşlanmasının hızlandığını ileri sürmektedir. Ayrıca, *BRCA* mutasyonları olan kadınlarda genel olarak yaşlanmanın hızlandığı da ortaya konulmuştur.

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vitro matürasyon işlemi zaman kaybı olmadan uygulanabilir. GnRH analoglarının kemoterapi sırasında kullanılmasının overyan rezervi koruduğuna yönelik bir kanıt yoktur. Sadece pelvik radyoterapi alan hastalarda overyan transpozisyon seçenek olabiiir. Postpubertal erkek hastalarda sperm kriyoprezervasyonu standart bir yaklaşımındır. Ancak prepubertal hastalarda testis dokusu kriyoprezervasyonu hala deneysel olarak kabul edilmektedir.

Over dokusu veya testiküler doku kriyoprezervasyonu bazı ülkelerde mevcuttur ve çoğu ülkede bir araştırma protokolünün parçası olarak sunulmaktadır. Dondurularak saklanan embriyoların, oositlerin veya over dokusunun uzun süreli saklama ile birlikte bozulduğuna dair herhangi bir kanıt yoktur ve klinik deneyim, bunların uzun yıllar boyunca uygun bir şekilde saklanabileceklerini göstermektedir. Dondurulmuş embriyolar, dondurma-çözdürme işleminde döllenmemiş oositlerden daha iyi sağ kalır. Olgun oositlerin kriyoprezervasyonu; partnerleri olmayan kadınlar, partnerleri olabilen ancak embriyo kriyoprezervasyonu ile ilgili pratik kısıtlamalar hakkında endişelenen veya IVF için donör sperm kullanmamayı tercih eden kadınlar için bir seçenekdir. Olgun olmayan oositlerin toplanmasının ardından in vitro maturasyon da gerçekleştirilmiştir. Avantajları arasında büyük dozlarda gonadotropinlerden kaçınılması ve daha az zaman kısıtlamasının bulunması yer alır. Over dokusunun kriyoprezervasyonu artık birçok ülkede araştırma ortamlarında gerçekleştirilmekte ve daha yaygın bir şekilde kullanılmaktadır. Bu teknik, over endokrin fonksiyonunun yanı sıra hamile kılabilme yetisinin geri kazanılma avantajına sahiptir. Over dokusunun kriyoprezervasyonu, yumurtalık kanseri olan kadınlar veya yumurtalık kanseri gelişme riski yüksek olanlar için ideal bir seçenek değildir. Sitotoksik tedaviye başlamadan önce postpubertal dönemdeki tüm erkek kanser hastalarına sperm kriyoprezervasyonu önerilmektedir (140,141).

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