

## İnfertilite ve Jinekolojik Kanserler

Mustafa BAĞCI<sup>1</sup>

Genel olarak infertilite, over ve endometrial kanser ile ilişkilidir, ancak meme kanseri ile ilişkili değildir. Endometriozis tanısı alan kadınlarda over kanseri insidansı daha yüksektir. Endometrial kanser insidansı, ovuluar bozukluğu olan kadınlarda daha yüksektir, ancak endometriozisi olan kadınlarda bu durum söz konusu değildir.

**GİRİŞ**

İnfertilite, genç yetişkinleri etkileyen en yaygın hastalıklardan biridir. Gebe kalmaya çalışan yedi kadından birine infertil tanısı konur(1) ve vakaların yarısından fazlasına muhtemelen kadın nedenlerinin katkıda bulunduğu tahmin edilmektedir (2,3). Polikistik over sendromu (PKOS) dahil olmak üzere yumurtlamayı etkileyen hormonal bozukluklar, kadın infertilitesinin en yaygın nedenleridir. Tubal faktör infertilitesi de yaygınken, endometriozis daha az sayıda vakaya katkıda bulunur (2).

Over, endometriyum ve meme kanserleri, çeşitli hormonal ve üreme risk faktörleriyle ilişkilidir. Nulliparite, erken menarş ve geç menopoz, bu malignitelerle daha yüksek riski ile ilişkilidir,

oysa her canlı doğumda risk azalır (4,5,6). Meme kanseri riski de doğum yapma yaşı ne kadar ileri olursa, artan yaşla birlikte artar (4), oysa yaşamın ilerleyen dönemlerindeki gebelikler yumurtalık ve endometriyum kanseri riskini azaltır gibi görünmektedir (5,6). Benzer şekilde, oral kontraseptif kullanımı, meme kanseri riskinde geçici bir artış (4) ve yumurtalık ve endometriyal kanser riskinde azalma (5,6) ile ilişkilendirilmiştir.

Önceki birkaç çalışma, hormonal stimülasyon kullanan infertilite tedavileri ile meme ve jinekolojik kanser riski arasındaki ilişkileri araştırmıştır. Bu çalışmalarda yinelenen bir konu, altta yatan infertilitenin neden olduğu potansiyel karışıklıktır (7,8,9). Kısırlığın hem nedenleri hem de sonuçları kanser riskini etkileyebileceğinden, ilişki karmaşıktır. Endometriozis ile yumurtalık kanseri ve PKOS ile endometriyal kanser arasındaki ilişkiler oldukça iyi kurulmuştur (10,11). Kronik anovülasyon ve PKOS'un olağan özelliği olan progesteronun karşıt bir antiöstrojenik etkisi olmadan endometriyuma sürekli östrojen stimülasyonu, bazı endometriyal kanserlerin gelişiminde bilinen bir karsinojenik etkiye sahiptir. Endometriozis ve yumurtalık kanseri arasındaki ilişki daha az anlaşılmıştır ve endometriozis ile

<sup>1</sup> Uzm. Dr., Tepecik Eğitim Araştırma Hastanesi, Jinekolojik Onkoloji Kliniği, Kadın Doğum, dr.mustafabagci@hotmail.com, ORCID iD: 0000-0002-9672-9140

rıca, yumurtalık kanseri riskinin, özellikle seröz borderline yumurtalık tümörü riskinin PKOS'lu hastalarda arttığı gösterilmiştir (81, 82, 83). Ayrıca, daha önceki çalışmalarda ovaryan berrak hücreli karsinom ve endometrioid karsinomun en sık ovaryan endometriozis ile ilişkili olduğunu bulduk (84, 85). Bu nedenle kısırlığın kendisi yumurtalık kanseri için bağımsız bir risk faktörü olabilir (86). Buna paralel olarak, yumurtalık kanseri için bir risk faktörü olarak OI tedavisini infertiliteden ayırmak zor olduğundan, OI ile tedavi edilen nullipar ve multipar kadınlar arasında kanser riskinde bir fark olup olmadığı tartışılmaktadır. Nieto ve arkadaşları, infertil hastaların birinci derece akrabalarında yumurtalık kanserine ilişkin retrospektif bir çalışma gerçekleştirdi ve OI tedavisi almasına rağmen gebe kalamayan infertil hastalarda yumurtalık kanseri riskinin arttığını gösterdi, (87). Rizzuto ve arkadaşları ayrıca OI ile tedavi edilen nullipar kadınlarda BOT riskinin multipar kadınlar murtlama döngüsü, daha yüksek yumurtalık kanseri gelişme riski ile ilişkili görünmektedir (68, 88, 89) .). Belirli OI ilaçlarının yumurtalık kanseri riskini artırıp artırmayacağını değerlendirmek için OI ilacının türüne göre alt grup analizleri yaptık. CC, özellikle ovulatuvar bozuklukları olan hastalarda ovulasyonu indükleyen en yaygın ilaçtı (90). Reigstad ve arkadaşları, CC'ye maruz kalan nullipar kadınlarda kanser riskinin arttığını bildirmiştir (HR = 2.5, %95CI: 1.3-4.8). Rossing ve arkadaşları ayrıca CC'ye maruz kalan kadınlarda yumurtalık tümörü riskinin arttığını bildirmiştir (SIR = 2.5, %95CI: 1.3-4.5). Barcroft ve arkadaşları tarafından yürütülen güncel bir meta-analiz, yukarıda sözü edilen ve CC'ye maruz kalmanın kanser riskinde önemli bir artışla ilişkili olduğunu sonucuna varan görüşü desteklemiştir (OR = 1.40, %95CI: 1.10-1.77 (91, 92)).

Shan ve arkadaşları, HMG'ye maruz kalan kadınlarda yumurtalık kanseri riskinde hafif bir artış olduğunu bildirdi (OR = 3.95, %95CI: 1.3-12.2). Çalışmalarda, GDT'lerin artmış IOC

ve BOT riski ile ilişkili olmadığı bulundu. GnRH-a, spontan adet döngüsünü yeniden oluşturabilen ve ovulasyonu indükleyebilen anovulatuvar kadınlara kullanıldığı çalışmalarda (93, 94) GnRH-a'nın IOC riskini artırmadığı gösterildi. GnRH-a'ya maruz kalan kadınlarda BOT riskine ilişkin verilerin bulunmaması nedeniyle daha fazla meta-analiz gerçekleştirilememiştir. Özetle, CC, GDT ve GnRH-a'nın yumurtalık tümörü riskini artırmadan OI tedavisi için güvenli olduğu kanıtlanmıştır.

Özetlemek gerekirse, OI tedavisi nispeten güvenliydi ve OI ve spesifik OI ilaçları döngüleri arttıkça kanser riskini arttırmamaktadır. Bununla birlikte, OI ile tedavi edilen hiç doğurmamış kadınlar için, daha yüksek bir tümör riskine sahip gibi görünmektedirler. Bu nedenle, bu kadınlar için sıkı izleme ve yeterince uzun takip gerekiyordu.

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