

Bölüm 1

MULTIPL MYELOMDA EPİDEMİYOLOJİ VE ETYOLOJİ

Kadir İLKKILIÇ¹

GİRİŞ

Multipl miyelom (MM), plazma hücrelerinin neoplastik proliferasyonu ile karakterize olan malign bir hastalıktır. Önemi belirsiz monoklonal gamopati(M-GUS), sessiz MM (SMM), semptomatik MM ve plazma hücreli lösemiye kadar değişen plazma hücre bozuklukları spektrumunu içerir. Kemik iliğinde çoğalan klonal plazma hücreleri monoklonal immunglobulin üretir ve organ tutulumuna neden olarak organ fonksiyon bozukluğuna neden olur.(litik lezyon,aby,hiperkalsemi,anemi vs..) Plazma hücreleri, IgG, IgA, IgM, IgD ve IgE immünoglobulin alt tiplerinden herhangi birini üretebilir.Bazen,immünoglobülinin ağır zincir kısmı miyelom hücreleri tarafından üretilmez ve hastalık sadece kappa veya lambda tipi olan hafif zincir üretimi ile ortaya çıkar. Çok nadir olarak, klonal plazma hücreleri önemli miktarda monoklonal protein üretemez ve nonsekretuar MM olarak ortaya çıkabilir. Klinik ve laboratuar olarak açıklanamayan anemi,kemik aşırısına neden olan litik lezyon, semptomatik veya tesadüfen keşfedilen hiperkalsemi, akut böbrek yetmezliği,serumda immunglobulin artışına bağlı total protein albumin terleşmesi vs gibi durumlarda multipl myelomdan şüphelenilir.

EPİDEMİYOLOJİ

Multipl miyelom,Amerika Birleşik Devletleri'ndeki tüm kanserlerin yaklaşık yüzde 1 ila 2'sini ve hematolojik malignitelerinde yüzde 17'sinden biraz fazlasını oluşturmaktadır (1). Erişkinlerde KLL den sonra ikinci en yaygın görülen hematolojik malignitedir.Tanıda medyan yaşı 69 olan ve ölüm ortanca yaşı 74 olan bir hastalıktır.

¹ Uzm. Dr. Recep Tayyip Erdoğan Üniversitesi Eğitim ve Araştırma Hastanesi Hematoloji Kliniği,/RİZE
email: kadir.ilkkilic@gmail.com

MGUS vakalarının çoğunun ya trizomiler ile ortaya çıkan immün globulin ağır zincir (IgH) lokusu veya genetik dengesizlik yada her ikisi ile birlikte ortaya çıktığı düşünülmektedir.

Sitogenetik değişiklikler içinde hiperdiploidi, 17p delesyonu, 13q delesyonu, t (4,14), t (11,14), t (14,16), NF kappa B aktivasyonu ve Ras mutasyonları vs bulunmaktadır.

MGUS(önemi belirsiz monoklonal gamopati)' un myeloma ilerlemesinde apoptoz disregülasyonu ve hücre döngüsünde bozulmanın yanı sıra İnterlökin-6, İnsülin benzeri büyümeye faktörü-1 (IGF 1), Vasküler endotel büyümeye faktörü (VEGF), Transforming büyümeye faktörü -beta (TGF BETA), İnterlökin-17, Tümör nekroz faktör- α (TNF ALFA), Toll like reseptörler (TLR) de rol almaktadır.

Anahtar Kelimeler: Multipl myelom, sitogenetik, epidemiyoloji

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