BÖLÜM 7

KETOZİS VE İNFERTİLİTE

Gökhan DOĞRUER [1]
Ahmet GÖZER [2]
Onur BAHAN [3]

GİRİŞ VE TANIM

Ketozis, sütçü ineklerde erken laktasyon döneminde kan, süt ve idrarda keton cisimciklerin konsantrasyonunun yükselmesi ile karakterize metabolik bir hastalıktır. Reprodüktif kayıplara ve verim azalmasına neden olur, şiddetli olgular ise sürüden erken çıkarma ve ölümle sonlanabilmektedir (1, 2). Süt ineklerinde postpartum dönemde ketozisin oldukça yaygın olduğu bilinmektedir (3). Loiklung ve ark. (4) yaptıkları meta-analiz çalışmalarında küresel olarak subklinik ketozis prevalansının %22,7 seviyelerinde olduğunu ifade etmektedirler.

Ketozis nedeniyle süt üretiminin dolayısıyla süt ineği işletmelerinin karlılığının ve sürdürülebilirliğinin olumsuz etkilendiği bildirilmektedir (5). Dohoo ve Martin (6) ketozisin süt verimi üzerindeki etkilerini inceledikleri çalışmalarında günlük süt veriminde 1-1,4 kg düzeyinde bir azalma olduğunu saptamışlardır. McArt ve ark. (7) subklinik ketozisli ineklerin postpartum ilk 30 günde süt verimlerinin sağlıklı ineklere göre 2,2 kg/gün daha az olduğu-

[1] Prof.Dr., Hatay Mustafa Kemal Üniversitesi Veteriner Fakültesi Doğum ve Jinekoloji AD., gdogruer73@yahoo.com
[2] Arş. Gör. Dr., Hatay Mustafa Kemal Üniversitesi Veteriner Fakültesi Doğum ve Jinekoloji AD., ahmetgozer@gmail.com
[3] Arş.Gör., Yozgat Bozok Üniversitesi Veteriner Fakültesi Doğum ve Jinekoloji AD., onurbahan@gmail.com

larını ve yağ metabolizmasını düzenler (127). Kolin yağ asidi metabolizmasında ve transportunda görev almaktadır. Karaciğerden yağların VLDL olarak dolaşıma verilmesinde görevlidir (131). Prepartum kolin uygulamasının postpartum kuru madde tüketimini, süt verimini, süt yağ ve protein oranını arttırdığı ifade edilmektedir (132).

Tedavide genel prensip propilen glikol, dekstroz, insülin, Vitamin B12/fosfor ve dekzametazon uygulamalarının olduğu görülmektedir. 300 ml %100'luk propilen glikolün 5 gün boyunca günde 1 defa uygulanmasının tedavide yeterli olduğu ifade edilmektedir. Dekstroz (500 ml %50'lik) uygulamaları ise sinirsel bulguların eşlik ettiği hipoglisemi ile seyreden şiddetli ketozis olgularında kullanılmaktadır. Tedaviye cevap vermeyen ketozis olgularında hepatik lipidozis şekillenmiş olabileceği ifade edilmektedir. Bu tür olgularda insulin direncinin şekillenebileceği dolayısıyla da insulin uygulamalarının tedaviye eklenebileceği belirtilmektedir. Ancak insulin enjeksiyonlarının maliyetinin yüksek olması insulin uygulamalarının tedavide yaygınlaşmasını önüne geçmektedir. Geçmişten bu yana ketozis tedavisinde kortikosteroidlerin kullanımının gerçekleştiriliği görülse de yağ ve protein yıkımını arttırması ve insülinin etkilerini engellemesi nedeniyle ketozis tedavisinde kullanımı önerilmemektedir. Vitamin B12 ve fosfor kullanımınının ise ketozis tedavisinde glukoneogenezisi desteklemesi açısından yaygın olarak kullanılmaktadır (28).

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