NONENZYMATIC GLYCATION OF NEUTROPHIL MEMBRANE PROTEINS:
Different Electrophoretic Mobility

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SUMMARY: *Ten insulin-dependent diabetics (all male, age range 20-52) were included in this study. Neutrophil-rich leukocyte suspensions obtained from each patient were mixed, homogenized, and centrifuged. Neutrophil membrane proteins in supernatant were seperated by electrophoresis on SDS-polyacrylamide gels. The same procedure was performed in the samples obtained from 10 matched control subjects. Silver staining of proteins in polyacrylamide gels showed different electrophoretic patterns in patients and controls. This is an evidence of enhanced nonenzymatic glycation of neutrophil membrane proteins and may be an explanation of low phagocytic activity in diabetics.*

NÖTROFİL MEMBRAN PROTEİNLERİNİN NONENZİMATİK GLİKASYONU:
Farklı Elektroforetik Mobilite

ÖZET: *On insüline bağımlı diabetli hasta (hepsi erkek, yaş aralığı 20-52), bu çalışmada ele alındı. Her hastadan elde edilen nötrofilce zengin lökosit süspansiyonları karıştırıldı, homojenize ve santrifüj edildi. Süpernatandaki nötrofil membran proteinleri, SDS-poliakrilamid jel elektroforeziyle ayrıldı. Aynı prosedür, 10 kontrol şahıstan elde edilen nümunede yapıldı. Poliakrilamid jellerinde proteinlerin gümüşle boyanması, hastalar ve kontrollerde farklı elektroforetik örnekler gösterdi. Bu, nötrofil membran proteinlerinin yüksek nonenzimatik glikasyonunu gösterir ve diabetli hastalarda düşük fagositik aktivitenin bir izahı olabilir.*

INTRODUCTION

Since diabetic patients have hyperglycemia of long duration, many structural proteins or long-half-life ones are exposed and glycated as in the cases of hemoglobin (1), basement membrane (2), collagen (3), erythrocyte membranes (4,5), albumin (6), some circulatory proteins (7), and keratin (8,9). This type of posttranslational modification has been proposed in the pathogenesis of the long-term complications of diabetes (10-12). Of these complications, the sensitivity of diabetic patients to infections