

A Case of Proteinuria in Hidradenitis Suppurativa

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Abstract

Observation: Chronic inflammatory skin diseases such as psoriasis and hidradenitis suppurativa have recently been linked to systemic consequences i.e. metabolic syndrome and cardiovascular risk. The latter has furthermore been linked to possible renal dysfunction. We report a case of proteinuria in hidradenitis suppurativa, and suggest that future investigations could explore whether renal dysfunction may be yet an additional systemic consequence of hidradenitis suppurativa.

Introduction

Research has established a link between the inflammatory skin disease psoriasis and cardiovascular risk [1], and recently also suggested renal dysfunction as an additional co-morbidity [2]. Hidradenitis suppurativa (HS) is also an inflammatory dermatological disease, with hallmark lesions consisting of recurrent nodules and scars in the axillary and inguinal regions. Emerging evidence suggests associated systemic co-morbidities [3] increasing the cardiovascular risk in HS. Furthermore, basement membrane thinning in the skin has been reported as a possible predisposing factor [4] in HS, and it may be speculated whether a similar dysfunction of the basement membrane could occur in other tissue e.g. renal tissue. No systematic studies of renal function in HS patients have been published. We report a case of a female HS patient with proteinuria suggestive of a possible link between HS and renal dysfunction.

Case Report

A 45-year-old female patient attending the Department of Dermatology at Roskilde Hospital for HS

developed proteinuria. The patient started getting boils at the age of 27, and reports no familiar disposition to skin diseases. The morphology of the HS lesions are described by the physician as multiple tomb stone comedones, 1-2 centimeter large nodules, sinusses, and scarring in the inguinal, axillary, and inframammary regions. The severity of HS was noted as Hurley score II and Sartorius score 19. The patient evaluated her quality of life impaired (Dermatology Life Quality Index 26). Previous topical treatment consisted of topical resorcinol 15%, topical clindamycin 0.1mg/ml, and topical azalaic acid with moderate effect.

The patient was obese, smoked 10-20 cigarettes per day, and was diagnosed with both diabetes mellitus and hypertension. She received metformin hydrochloride for the diabetes and angiotensin converting enzyme inhibitor for the hypertension.

At the age of 34 she was found to have proteinuria, and was referred to the Department of Nephrology for further evaluation. A kidney biopsy was performed and the histological changes were described as focal segmental glomerulosclerosis. Recent measure of proteinuria was 5 grams per day. Creatinin was 86 $\mu\text{mol/l}$, and eGFR was 62 $\text{mL}/\text{min}/1.73\text{m}^2$.

Discussion

Chronic inflammatory dermatological diseases may have systemic consequences i.e. cardiovascular risk. Previous literature reports possible renal dysfunction in psoriasis. We report a case of HS co-occurring with proteinuria discovered after onset of HS which might indicate a causal relationship. The patient however also presented several relevant comorbidities which all may explain the proteinuria: Diabetes, hypertension, and obesity [5]. Glomerulosclerosis has been histologically described in diabetic and obesity-related nephropathy [5]. Additionally, smoking is a risk factor for albuminuria [5].

There is however also a case for a more causal link between HS and proteinuria. A skin biopsy study of 20 HS patients reported basement membrane thinning [4]. We speculated whether a similar structural defect could occur in other tissues e.g. renal tissue rendering the kidney more prone to proteinuria.

In any case, disregarding the cause of a possible link between HS and proteinuria, physicians may be attentive of renal function in HS patients due to the higher risk of co-morbidities perpetuating renal dysfunction.

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