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RESEARCH ARTICLE

GROVER'S DISEASE: ANALYSIS OF A CASE EXHIBITING SIMILARITIES WITH PEMPHIGUS

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Abstract

Grover's disease, also known as benign acantholytic dermatosis or acantholytic dyskeratosis, is a rare dermatosis characterized by a pruritic skin rash on the trunk, arms, and legs. Although the exacr pathogenesis of this disease remains unknown, certain factors such as heat, excessive sweating, sun exposure, and systemic diseases have been implicated in its onset ; however, it is generally considered to be an inflammatory reaction. Histology of the sample revealed suprabasal acantholysis, which manifested as clefts rather than true blisters, with mild dyskeratosis. These characteristics raised diagnostic uncertainty between Grover's disease and pemphigus vulgaris. However , testing for autoantibodies against intercellular spaces returned negative, confirming the diagnosis of Grover's disease. Due to the possibility of spantaneous regression , treatment options are limited. For cases of moderate and temporary nature, local corticosteroid therapy alone is often sufficient.

Introduction:-

Grover'sdisease, alsoknown as benignacantholyticdermatosis or acantholyticdyskeratosis, is an uncommondermatosisthatmanifests as a pruritic, erythematous, vesiculopapular rash localized on the trunk, arms, and legs[1,6].The diseasemay affect 0.1% of the general population, with a predominance of males, with a male-to-female ratio of 2.4 to 1 and an averageage of onset of 61 years[2]. Although the exact pathogenesis of thisdiseaseremainsunknown, itsevolution but certain factors, such as heat, excessive sweating, sunexposure and systemicdiseases, have been implicated in its occurrence; however, itisgenerallyconsidered an inflammatoryreaction.

The diagnosis of Grover'sdiseasecanbe made clinically, but itis important to performadditional tests to confirm the diagnosis and excludeothersimilardermatologic conditions, such as pemphigus vulgaris. Direct immunofluorescence staining and potassium hydroxidepreparation tests are usuallynegative for Grover'sdisease. Final confirmation of the diagnosisisbased on a skin biopsy, whichreveals Inta-epidermalacantholysis, indicatingloss of adhesionbetween the keratinocytes of the epidermis.

Case report

A youngMoroccan man, 25 yearsold, with no personalhistory of diabetes, hypertension or chronicdisease, no particularsurgicalhistory or toxicbehavior, no food, drug or environmentalallergy. He presented to ourclinicwith a 5-year history of an erythematous popular oozing rash on the upper back thatprogressed in flares and remissions. On physicalexamination, the lesionsappeared as well-limitederythematous plaques withirregularborders, accompanied by fine superficialscaling.

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On dermoscopy, a pinkish-yellow background withpolymorphiclinear, glomerular, and hairpinvesselssurrounded by a whitish halo were the patterns thatwereobserved.

The patient reported the presence of intense itchingthatworsenedaftersweating or taking hot baths. Thesesymptomswere more pronouncedduring the fall and winterseasons. Despite the use of severaltopicaltreatments, heexperienced minimal relief.

A biologicalworkupwasperformed in the laboratoryincluding a blood count, total IgE, C-reactiveprotein, liver and bloodionogramwhich came back withoutany notable abnormality, and HIV, hepatitisB and C, VDRL serologieswere all negative.

The histology of the specimenrevealed supra-basal acantholysisrealizing cracks ratherthantruebullae, of suprabasallocalization; itisassociatedwith a slightdyskeratosis. Thesecharacteristicsled to a doubtfuldiagnosisbetweenGrover'sdisease and deep pemphigus. However, an anti-cellspaceautoantibody test came back negative, whichconfirmed the diagnosis of Grover'sdisease in its pemphigus-likeform.

The patient wasstarted on acitretin, with a daily dose of 25 mg corresponding to 0.4mg/kg. In addition, an application of dermocorticoidswasrecommended. The resultswerepromising, as the patient'sclinical condition improvedsignificantly and the pruritusdisappearedcompletely. This improvementtestifies to the effectiveness of the prescribedtreatment.

Discussion:-

Transientacantholyticdermatosis, commonlyknown as Grover'sdisease, is a rare acquired condition whoseoriginremainsunknown. It was first described by Ralph Groverin 1970[1,2].The condition primarily affects middle-aged and olderadults, with a male predominance; ratio of 2 to 3 to 1; and Caucasians. Characteristicsymptomsincludeerythematous papules and sometimesvesicles, primarilylocated on the uppertrunk and proximal extremities, accompanied by variable pruritus. [3,4,5]

Despiteits initial label as a transientdisease, lasting only a few weeks, later reports have shownthatGrover'sdiseasemayextend over severalmonths or recur.

It is important to note in the case presentedthatinvolvement of the back isusual in Grover'sdisease. In the medicalliterature the rash isusuallytruncalwith a predominance on the anteriorchest, upper back and lumbarregion. Involvement of the palms, soles and scalp is rare.[6]

In terms of dermoscopy, the obsercedfeaturesencompass a pinkish backgroundwith diverse vascular patterns (includingglomerular, dotted ,lineal and hairpinvessels), as welle as star-or oval- shapedyellow-white structures encircled by a white halo. Additionally, scalingisobserved. [8,9]

In addition, variousfactors have been identified as aggravating the overall condition, such as prolongedexposure to the sun, which leads to increasedheat and sweating. Studies have alsoshownthatprolongedbedrestcanbe an aggravating factor. In ourpatient's case, hewasadvised to avoideach of these triggers as hissymptomspersisted, in order to preventtheirnegative impact on the overall course of hisdisease.

Typically, histopathologicalanalysisrevealslocalizedacantholysis and varyingdegrees of dyskeratosis. Four histologicalsubtypescanbedistinguished: the Darierdiseasesubtype, the pemphigus-likesubtype, the Hailer-Haileydisease-likesubtype and the spongysubtype[1,7].Thesedifferentsubtypescanoccur in isolation or coexistsimultaneously.

Managingourpatient'streatmentwithtopicalsteroids and acitretin has proven to be an effective initial therapeuticapproach for this condition, providingsymptom relief, reducedrisk of adverse sideeffects, and costeffectiveness. In the literature, first-line treatmentconsists of topicalemollients and steroids and vitamin D analogues in combinationwith H1 antihistamines. Systemicretinoids, oral corticosteroids or phototherapy are reserved for more severe or treatment-resistant cases[10].

Conclusion:-

Grover'sdiseaseis a rare skin condition characterized by papular rashes and intense pruritus. Althoughitspathogenesisis not fullyunderstood, severalstudies have found associations with cancer, chemotherapy, and a history of organ transplantation. This pathology isgenerallybenign and canbediagnosed by a skin biopsyrevealing the presence of intraepidermalacantholysis. Due to the possibility of spontaneousregression, the treatment has a codingfailure. For cases of a moderate and temporary nature, administration of simple local corticosteroidtherapyis more thansufficient. In the reported patient, treatmentwithdermocorticoidswasinsufficient, but the addition of acitretinresulted in arapidclinicalremission.

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