International Journal of Sciences: Basic and Applied Research (IJSBAR)

ISSN 2307-4531
(Print & Online)

http://gssrr.org/index.php?journal=JournalOfBasicAndApplied

A Case Report of Small Vessel Vasculitis Secondary to Steroids Use

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Abstract

A 47 year old Saudi male, presented to hospital* with the chief complaint of skin rash over the buttocks and lower limbs of one day duration. The rash followed steroids treatment to treat local allergic reaction to hair dye. The patient was quite well before that and his medical history, examination and laboratory investigation revealed nothing of concern. After admission, the skin rash had progressed to multiform rash and pustules following administration of methyl prednisolone 40 mg intravenously. The patient's condition progressed and he developed gastrointestinal symptoms. The patient eventually started to respond to medical management and was discharged in better health but he was readmitted after two days with the same skin rash due to the wearing off of the effect of infliximab injection. A second dose of infliximab injection was given and his condition improved.

Keywords: Small vessel vasculitis; henoch–schonlein purpura; allergic reaction to hair Dye; multiform rash; infliximab injection; rash secondary to steroid use; leukocytoclastic vasculitis; total total parenteral nutrition.

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1. Introduction

Reactions to one hair- dye product or another after use are not that uncommon. They range from irritation occurring locally in areas in direct contact with dye (irritant contact dermatitis) to genuine allergy, which will provoke local symptoms (allergic contact dermatitis). It may also produce a systemic reaction affecting other areas of the body. In both cases, the symptoms can vary from very mild to quite severe. The local irritation will tend to affect the scalp, neck, forehead, ears and eyelids. The generalized symptoms may include more widespread itching, or rarely, anaphylaxis.

The vast majority of cases of small vessel vacuities follow acute infection (1)or administration of new medication (2)but it is very rare if any to see small vessel vasculitis (henoch-schonlein purpura) (4,5) secondary to steroids.

The aim of reporting this case is to shed lights on the provoking effect caused by administering corticosteroids to treat hair dye allergic reactions.

2. Materials and Methods

A 47 year old Saudi male, presented at our hospital* with the chief complaint of skin rash over the buttocks and lower limbs of one day duration.

The patient was quite well, not known to have any medical problem. Six days prior to his presentation he visited his barbershop where he had hair dye applied to his hair, beard and moustache. The next day he developed burning sensation, redness and swelling of the skin of his face. He sought medical advice where he was prescribed prednisolone 30 mg tablets daily for five days. On the 6th day, he developed the skin rash. He had no other complaint and his systematic review was unremarkable.

He gave no history of other drugs taken at the time nor having similar attacks before. His family history was irrelevant.

On examination, his general condition was fair, vitally stable, not febrile, no joint swelling, no palpable lymph nodes. The rash was purpuric which involved the buttocks and lower extremities with mild scattered rash on the chest and the abdomen (Figure 1). The other systemic examination was unremarkable.

The patient was admitted to the hospital, he was given methyl prednisolone 40 mg intravenously. The next day the skin rash had progressed to multiform rash and started to develop vesicles and bullae, more on the lower limbs (Figure 2). So, prednisolone was discontinued but in spite of that the rash continued to progress to pustules.

3. Results

The initial routine investigations were all within normal limits, but repeated lab results showed:

- CBC: WBC elevated to 33000, the Hgb dropped from 16g/dl to 11 g/dl, the PLT increased to more than 700,000.
- His inflammatory marker increased: CRP 20, ESR 50.

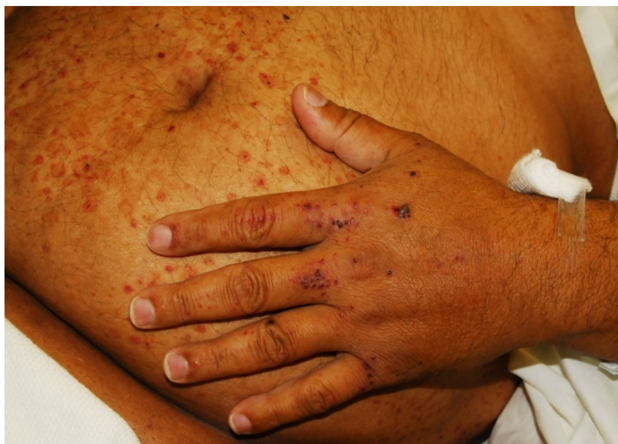


Figure 1: Scattered purpuric rash on the patient's chest and abdomen (2)

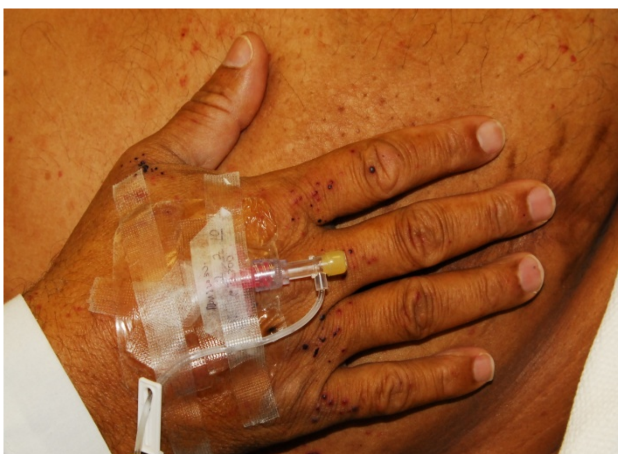
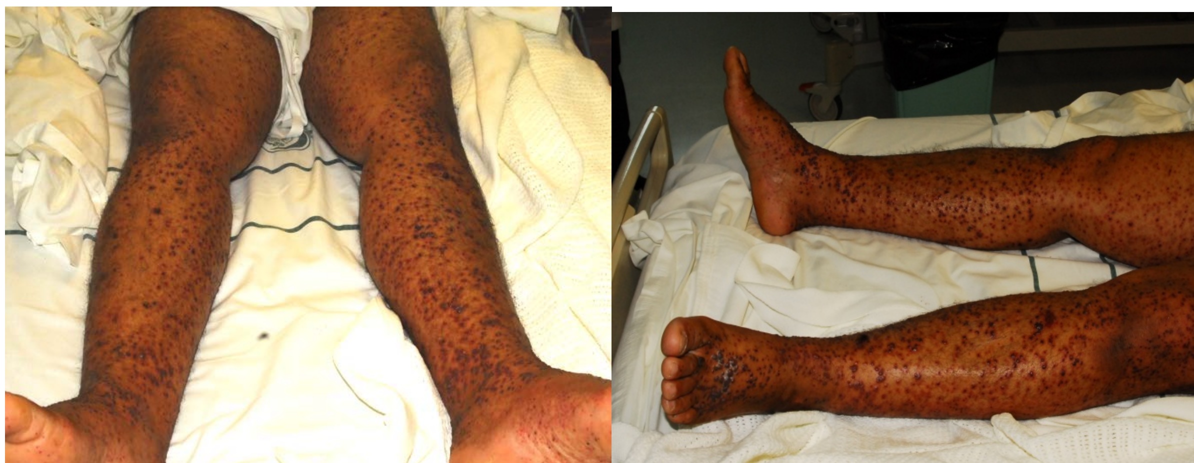


Figure 2: Multi form rash in the patient's lower limbs



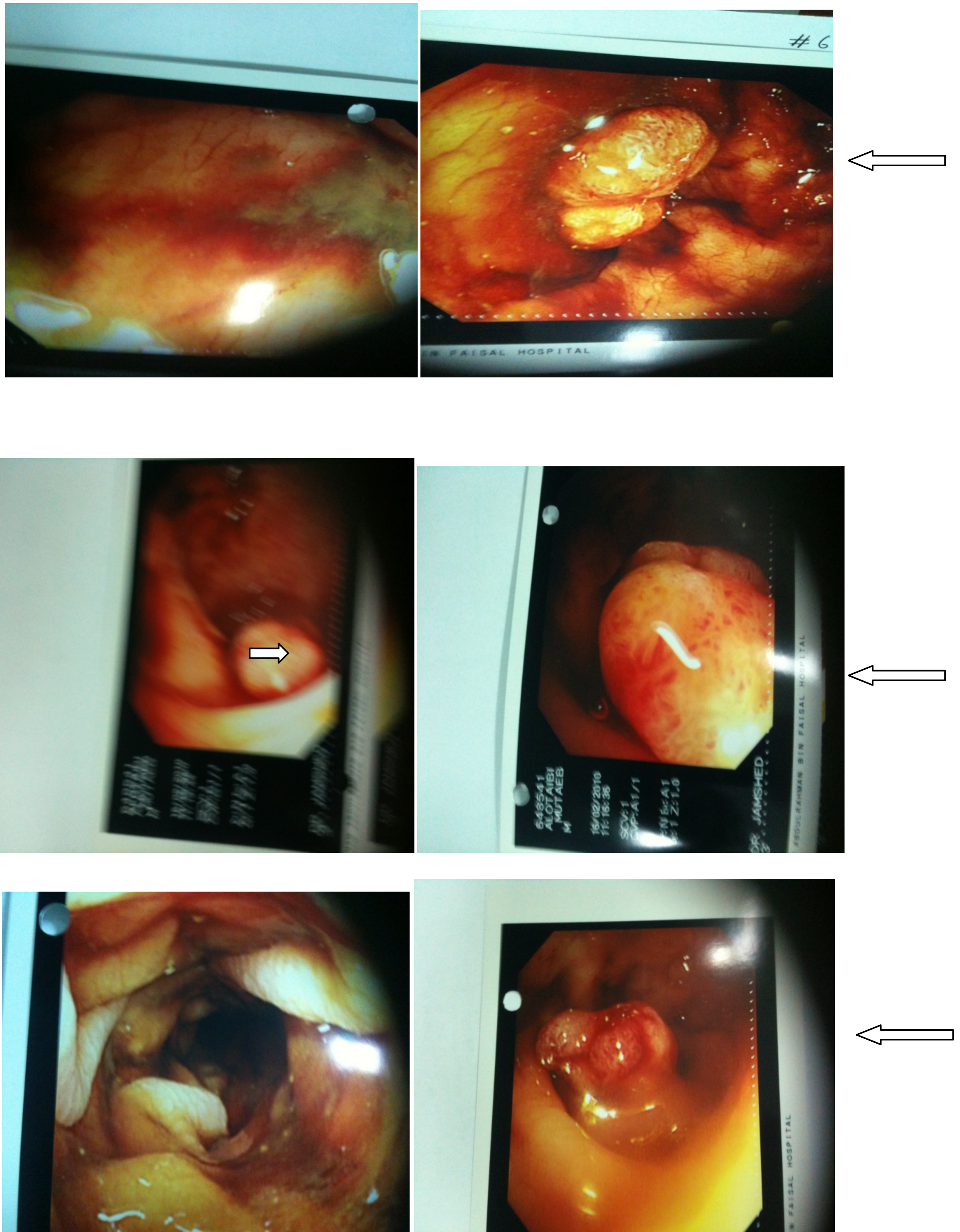


Figure 3: Colonoscopy findings of the patient

Arrow: Rectal polyp (incidental finding)

4. Conclusions

Following the deterioration of the patient's condition and new laboratory findings he was given empirical

parenteral antibiotics.

The dermatologist was consulted, evaluated the patient, skin biopsy taken, and he prescribed topical potassium permanganate and Fusicort skin ointment.

However, the rash was more progressive, for that the Fusicort was changed to plain Fusidic Acid skin ointment aiming to avoid steroids. The patient was started on Mycofenalate tablets and intravenous immunoglobulin infusions. He then started to develop gastro- intestinal symptoms in the form of nausea, abdominal pain and bloody diarrhea.

The patient underwent colonoscopy examination, which showed vasculitic changes (Figure 3). The Patient received infliximab injection then he was kept NPO (nil per oral) and started on (TPN)total parental nutrition.

After two weeks of total parental nutrition he was gradually started on oral intake after his gastro intestinal symptoms subsided. His skin rash started to improve gradually, his general condition was improving. His condition improved and he was discharged home in stable condition. His skin biopsy showed leukocytoclastic vasculitis.

The Patient was re-admitted after two days with the same skin rash. Since infliximab injection effect covers only two weeks, a second dose of infliximab injection was given. His skin rash improved and he was discharged home on mycofenolate tablets for 7 days and Vancomycine 250 mg for 10 days since bowel sepsis was suspected.

Fortunately the patient did not develop serious complications like pyelonephritis(2) or pulmonary hemorrhage (3).

References

[1] Chiu Cs et al. Annual Leucocytoclastic vasculitis induced by clorzoxazone BrJDermatol 2004;150:153.

[2] Egan CA,et al ;Relapsing henoch-schonlein purpura Associated with pseudomonasaerogenosa pylonephritis .J .Am Acal Dermatol 1999;41:381.

[3] Paller As ,et al. pulmonary hemorrhage an often fatal complication of henoch-scholein purpura .pediat DERMATOL 1997;14:299.

[4] Piette, what is henoch-schonlein purpura,and why should we care (editorial)?Arch Dermatol 1997 ;133:438.

[5] Tancrede-Bohin E ,et al. Henoch-schonlein purpura in adult patient .Arch Dermatol 1997;133:438.

"The authors declare(s) that there is no conflict of interest regarding the publication of this paper."