

Toxic Epidermal Necrosis with Complicating Course of Conjunctivitis and Synechia of Labia to Rectovaginal Fistula: A Rare Case

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Abstract

Toxic epidermal necrolysis (TEN) is a severe drug-related reaction characterized by mucosal erosion and epidermal detachment occurring on more than 30% of the body surface area. Vaginal complications have been reported in about 50% of patients with TEN. Here, we report a 58-year-old woman who presented with complaints of red peeling rashes that initially appeared in the armpits and then spread to all of the body include mucosa eyes, mouth, and vagina. The complaints arose after the patient took meloxicam and allopurinol. TEN complications in the mucosa of the eyes and mouth are frequently encountered, but vaginal synechia complicating into a rectovaginal fistula is a very rare case. The author could hardly find any references mentioning rectovaginal fistula as a subsequent complication of TEN. Therefore, further research is needed regarding rectovaginal fistula as a complication of TEN.

Keywords: Toxic Epidermal Necrolysis, Conjunctivitis, Vaginal Synechia, Rectovaginal Fistula.

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Introduction

Stevens-Johnson syndrome and toxic epidermal necrolysis (SJS/TEN) are dermatological emergencies characterized by acute mucocutaneous disorders and widespread epidermal necrolysis. SJS/TEN are classified based on the body surface area (LPB) involved.¹ The diagnosis of SJS is epidermolysis <10% LPB, SJS/TEN epidermolysis 10-30% LPB, TEN epidermolysis >30% LPB.² The pathogenesis of SJS/TEN is not fully understood. It is thought to be a T cell-mediated type IV hypersensitivity response. Medications are the most common trigger for SJS/TEN.¹

Clinical manifestations of SJS/TEN include non-specific symptoms such as fever, headache, cough, runny nose and malaise for 1-3 days. Then skin lesions such as erythema, vesicles, papules, excoriation, blackish crusts and epidermolysis appear.

Nikolsky's sign (+) is present. SJS/TEN is characterized by involvement of mucous membranes such as the eyes, mouth and genitals.³

Nonmedicamentous management of TEN is to maintain fluid and electrolyte balance, monitor temperature to prevent hypothermia, provide adequate nutrition, care for skin, eyes and oral mucosa to prevent secondary infection.⁴

Medicamentous management of TENs is to first identify and then stop taking drugs that are suspected of being a trigger. Systemic therapy is given in the form of corticosteroids and analgesics. In patients suspected of TENs, high doses of Intravenous Immunoglobulin are given. The combination of IVIG and systemic corticosteroids can shorten the healing time. Systemic antibiotics are also given if there are indications such as secondary infection or sepsis.^{5,6}

Treating SJS/TEN and its complications often involves the expertise of several disciplines such as dermatology, plastic surgery, eye, urogynecology, and psychiatry. Vulvovaginal involvement is common in 70% of women during the acute phase of SJS/TEN. The most commonly detected genital lesions are erosive and ulcerated vaginitis and vulvar bullae. These lesions tend to resolve within 1-8 weeks, but may persist for several months and up to a year after the acute disease period. Long-term consequences of genital activity are labial agglutination, introital stenosis, synechia and vaginal stenosis, vaginal and vulvar adenosis, hematocolpos, and hematometra.^{7,8}

Case Report

A 58-year-old woman was referred to our hospital with complaints of a red, scaly rash all over her body. Initially, the patient complained of joint pain, then she consulted a doctor and was given meloxicam and allopurinol. About 2 weeks after taking meloxicam and allopurinol, red blisters appeared in her armpits, which felt hot and painful, and then the blisters burst. Subsequently, the red rash spread to almost her entire body. Erythema and erosion were found in the eye area as well as the lips. In the vaginal area, the patient's labia minora appear to fuse together, and the vaginal introitus is closed, with erosion of the skin of the labia majora. During the journey, the patient requested to go home even though the doctor still recommended being hospitalized.

Two weeks later, patient presented with complaints of being unable to hold bowel movements and stool coming out of the vaginal opening, pain, and difficulty urinating. The patient was referred to the obstetrics department and no abnormalities were found. The patient was diagnosed with rectovaginal fistula. Physical examination showed his general condition was weak, blood pressure 138/67 mmHg, heart rate 102/min, breathing 22/min, temperature 36.8°C, SpO2 98%. The general state is within normal limits. Dermatological status: In the area of the thoracopabib, there are vesicles, the skin appears erythematous, with a pronounced border, numerous, mostly broken into erosion, crusting, painful (+), Nikolsky sign (+). On July



Figure 1: 58 years old female patient shows signs of SJS/TEN skin condition; A) upper extremity, anterior body, B) eye.

July 18, the patient underwent a vulva and vaginal biopsy. The histopathological examination results showed a non-specific inflammatory process, with no signs of malignancy detected. Unfortunately, we are unable to provide pathology images due to limitations at our hospital, which cannot perform biopsies; therefore, the patient had the biopsy done at another hospital. As for the treatment given to the patient, it included Meropenem 1 g every 8 hours (IV), Methylprednisolone 125 mg every 12 hours (IV), albumin transfusion 1 bottle/day, Omeprazole injection 40 mg every 12 hours, Prednisolone acetate eye drops 2 drops, 6 times a day, and supportive care was provided at the hospital until the condition improved. On the lesions,



Figure 2: Complication Of SJS TEN; A) synechiae of labia B) rectovaginal fistula.

vaseline album were applied twice daily. Cold compress with 0.9% NaCl fluid was applied 3 times a day on the lesion, accompanied by aseptic care. The patient was then referred to a central hospital for vaginal reconstruction.

Discussion

Meloxicam and alopurinol is drug with a high risk to induce SJS/TEN. Mucosal complications are common in TEN cases. In this case there were complications in the eyes and mouth which were immediately treated immediately so as not to cause ongoing complications. In cases of complications in the female organs and urinary tract can occur in the acute and chronic phases of TEN. For female patients with TENs, genital examinations should be scheduled as soon as possible to avoid genital tract obstruction and future sexual problems.⁹

This is especially mandatory for patients who report vaginal or urinary discomfort, as these complaints may indicate vaginal erosion and ulceration. In our patients, early identification and management prevented the development of vulvovaginal adhesions into vaginal synechiae. However, during treatment, the patient chose to go home and did not continue the therapy, resulting vaginal adhesions progressing become rectovaginal fistula.

As was the case at the beginning of admission, the patient presented with vaginal synechiae. Vaginal synechiae (tissue adhesions in the vagina) do not directly cause a rectovaginal fistula but long-term mucosal damage in the genital area can cause rectovaginal fistula.⁹

In the research by Anirudha et al, developed chronic manifestations in the form of labial synechiae is (16.66%), vaginal synechiae is (8.33%). Rectovaginal fistula area is caused by complications of underlying diseases, injury, and surgery.¹⁰ Based on the author's search, both at the national and international levels, there has never been a case where SJS/TEN developed into a rectovaginal fistula. The findings in this patient are certainly a rare case that makes us consider that rectovaginal fistula can also be caused by TEN. Further research is needed into how TEN causes rectovaginal fistula and how common it is.

Conclusion

SJS/TEN involves the mucosa of the eyes, mouth and genital tract. TEN that is not managed properly and thoroughly can lead to rectovaginal fistula complications

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Author's Contribution

RAM: Manuscript writing, designed and edited the manuscript.

LA: Final approval of the version to be published.

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