

Case Report

Unusual case of E. Coli haemorrhagic Cellulites

Dr. Sumera Nawaz, Dr. Fahad Zakir, Dr. Misbah Younus, Dr. Faseeha Sohail and
Dr. Farzeen Tanwir*

Abstract

Matrix Dynamics Group – Faculty of
Dentistry, University of Toronto,
Toronto, ON M5S 3E2 Canada
Tel: +1- 647-281-6064

*Corresponding Author's E-mail:
farzeen.tanwir@utoronto.ca

A 15-year-old male with no known co-morbid visited via emergency with left leg swelling and feverish for one day. He had history of some local injection at the side of his left buttock. Serious discharge was seen and haemorrhagic blisters all over the legs were seen. Patient was febrile and presented with decreased platelets counts too. Intravenous antibiotics, hydration and dressing were done and cultures for further investigations. Wound c/s found to be positive for *E. coli*. Patient took three days of treatment discharge on request and visited outpatient department with worsened deep sited wound and pussy discharge involving the skin tissues, bone is spared.

Key Words: E.coli, Enterococcus coli, cellulites

INTRODUCTION

Cellulitis in adult is caused by streptococcus and staphylococcus. In some cases, it is caused by E.coli, proteus and H.influenza. E.coli causes infection normally in the urinary tract infection and digestive tract infection.

E.coli does not usually cause cellulites in adult; it causes immunocompromised patients and diabetics. In our case, the hemorrhagic cellulites is in lower limbs.

Skin and tissue infection caused by E.coli cellulites causes severe damage to the body. The cost on treatment is much higher and infectious if not timely controlled then cause severe damage.

Skin and soft tissue contaminations are the most widely recognized explanations behind individuals to look for therapeutic guidance. Hospitalization needed in some serious cases, intra venous antibiotics and antipyretics needed. In our set up, such cases are rarely diagnosed as many people don't visit hospital due to affordability issues.

Case details

A 15-year-old Male with no known co-morbid came to the ER with left (posterior) leg and knee swelling and pain for 1 day. According to the patient, 1 week back he had

high-grade fever and joint pains for which he was administered I/G pain killers by a local GP. Since then he started having pain and swelling at injection site which subsided in 2 days and he developed pain and swelling in left leg. On examination of the left leg swelling, it was noticed from posterior and medial aspect of left thigh and extended up to upper part of the leg. It was tender, erythematous and mild oedema was noted. Serous discharge was seen. Rest of the systemic examination was unremarkable. DVT was ruled out using U/S Doppler and a clinical diagnosis of cellulites was made. Pt was started on antibiotics (Clindamycin + Piperacillin and Tanzobactam).

On investigation, Patients haemoglobin was low (9.1) and TLC was on higher side (16.8). He had thrombocytopenia (Plt-93) which progressed to 63 and then were on a rising pattern. Initially his Urea/ Creatinine was deranged (132/1.4) which improved after 4 days. His CRP was elevated (131.59) Rest of the investigation were within normal limits including PT/INR, Electrolytes and Urine Dr. His Blood cultures were negative.

On day 3, patient developed Purpuric rash involving the same site as cellulitis. It did not involve any other part of the body. No other bleeding site was noticed. Later in



Figure 1. Blister



Figure 2. Purpuric rash

the day small blisters started appearing on the site of purpura and involved whole area in a day. Blisters were multiple dark red, tense, non-tenders, 2cm-5cm in size. Aspiration from blisters was done and culture showed *E.coli*. Antibiotics were continued according to CS and patient was discharged.

Patient also developed scrotal swelling bilaterally during the course of his admission. O/E he had bilaterally enlarged scrotum with oedema and mild tenderness. Transillumination test was positive. Lymph nodes were not palpable and scrotal support was advised.

DISCUSSION

A skin and delicate tissue contamination is assumed to be the standout amongst the most well-known diseases in patients of all age gatherings. Contaminations for the most part are self-restricted or can be treated with anti-infection agents. Be that as it may, direct or serious cases may require hospitalization and parenteral treatment.¹ The most widely recognized causative specialists are *Staphylococcus aureus* and high-impact streptococci.²⁻⁴ Be that as it may, a few reports partner

that enter bacterium *Escherichia coli* with Skin and soft tissues infections have been distributed: *E. coli* was observed to be the causative operator of neonatal omphalitis,⁵ cellulitis confined to lower or upper appendages,⁶ necrotizing fasciitis,⁷ surgical site contaminations,⁸ diseases after consume wounds,⁹ and others.

CONCLUSION

In our case, the presentation of *E.coli* is unusual. Timely management can improve outcome.

ACKNOWLEDGEMENT

Thanks to Dr. Umer Jehangir for helping in reporting the case.

Conflicts of Interest

The authors declare that they have no competing interests.

REFERENCES

- Fraser N, Davies BW, Cusack J (2006). Neonatal omphalitis: a review of its serious complications. *Acta Paediatr.*; 519-522.
- Fung HB, Chang JY, Kuczynski S (2003). A practical guide for the treatment of complicated skin and soft tissue infections. *Drugs.*;63:1459-1480.
- Li DM, Lun LD, Chen XR (2006). Necrotising fasciitis with *Escherichia coli*. *Lancet Infect Dis.*;6:456.
- Moet GJ, Jones RN, Biedenbach DJ, et al. (2007). Contemporary causes of skin and soft tissue infections in North America, Latin America, and Europe: report from the SENTRY Antimicrobial Surveillance Program (1998-2004). *Diagn Microbiol Infect.*
- Rodgers GL, Mortensen J, Fisher MC, et al (2000). Predictions of infectious complications after burn injuries in children. *Pediatr Infect Dis.*;19:990-995.
- Sharma S, Verma KK (2001). Skin and soft tissue infection. *Indian J Pediatr.*;S46-S50.
- Stulberg DL, Penrod MA, Blatny RA (2002). Common bacterial skin infections. *Am Fam Physician.*;119-124.
- Tourmousoglou CE, Yiannakopoulou EC, Kalapothaki V, et al (2008). Surgical-site infection surveillance in general surgery: a critical issue. *J Chemother.*;20:312-318.
- Yoon TY, Jung SK, Chang SH (1998). Cellulitis due to *Escherichia coli* in three immunocompromised subjects. *Br J Dermatol.*;885-888.