

Fournier's Gangrene in Neonate – A Rare Clinical Entity A Case Report

Dr Sanjay Joshi, Dr Parvez Mujawar,
Dr Sampat Deshmukh, Dr Param Binayakiya, Dr Avinash Chaudhari,
Dr. Shrikant Patil.

Abstract: Fournier's Gangrene is a group of clinical entities including idiopathic gangrene of scrotum & periurethral region associated with necrotizing cellulites[1][2]. Mainly seen in adults, though we report we report a case of Fournier's Gangrene in 20 days old neonate. Child was treated with broad spectrum antibiotics & aggressive surgical intervention. Wound healed by secondary intention. Outcome was good & follow up was ensured

Key words: Fournier's Gangrene, necrotizing cellulites, neonate, good outcome.

I. Introduction

Fournier's Gangrene is named after Persian venerologist Jean Alfred Fournier in 1883[3] who described it as fulminate gangrene of penis & scrotum, though Bourienne (in 1764) & Avicenna (in 1877) had described this earlier[4]. It was firstly described as idiopathic entity but later found that source of infection as perineal & genital skin infection, anorectal or urogenital trauma including perineal or pelvic injury most commonly Gastrointestinal track, Genitourinary tract & cutaneous infections. It may be associated with immunocompromised conditions, diabetes mellitus, acute renal failure, abscess, omphalitis, diaper rash insect bite & circumcision[5][6][7][8][9]. This is a case report of our experience with management of this uncommon neonatal Fournier's Gangrene.

II. Case Study

We report a case of 20 days old neonate admitted with complaints of swelling & redness of scrotum & penile region with abdominal distention since 3-4 days. Patient was unimmunized & uncircumcised, delivered by full term normal vaginal hospital delivery with average birth weight (2.4kg) & was on exclusive breast feeding. On detailed physical examination baby was febrile, toxic looking, sclerematous with swelling over scrotal region with superficial necrosis, Patient also had abdominal distention & peeling of skin over chest & abdomen. Investigation showed positive septic screen. Blood culture suggestive of staphylococcus aureus. Patient was treated with broad spectrum antibiotics, surgical debridement, Intravenous Immunoglobulins & supportive care. All necrotic tissue was debrided & wound healed by secondary intention. Patient was discharged on 14TH day & doing well on follow up at 1 month.



On the day of Admission



Post op. day 2



on follow up

III. Discussion

Fournier's Gangrene is a primary disease of adults, however few cases reported in pediatric & neonatal age group. Our description about Fournier's Gangrene in neonate will be an addition to the literature in

Fournier's Gangrene in children. Earlier it was thought to be an idiopathic rapidly progressive gangrene of genitalia, however it is now recognized as infective necrotizing fasciitis. The source of infection being perineal & genital skin infection, anorectal or urogenital trauma including perineal or pelvic injury, omphalitis, localised abscess, diaper rash, insect bite & circumcision [5][6][7][8][9]. We didn't screen patient for any immunodeficiency. Our patient present with acute onset necrotizing cellulites with severe septicemia, treated with aggressive surgical debridement, broad spectrum antibiotics & Intravenous Immunoglobulins.

Infection is frequently associated with polymicrobial flora including gram positive, gram negative or anaerobic organisms. We isolated staphylococcus aureus. Wound heals by secondary intention. Some authors advice early skin grafting to reduce hospital stay [8]. When source of infection is from anorectal region or urinary extravasations periurethral inflammation, urinary or fecal diversion is indicated [10].

IV. Conclusion

Though rare, the outcome of Fournier's Gangrene in neonate is good [5][6][7], as compared to adults. This may be due to relatively low co morbid systemic condition & skin flora being the source of infection compared to anorectal [11] & urogenital flora in adults.

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