A CROSS-SECTIONAL STUDY OF FIXED DRUG ERUPTION OF MALE AND FEMALE GENITALIA AT A TERTIARY CARE HOSPITAL OF MIDDLE GUJARAT, INDIA

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ABSTRACT

OBJECTIVES: The point of this study was to introduce a progression of instances of genital lesion with fixed drug eruption, analyze the culprit drug, and distinguish the adjustment of example of medications causing them.

METHODS: Finding of fixed drug eruption (FDE) was upheld by a positive history and actual assessment. Information including age, site of lesion, time stretch between drug organization, and FDE improvement was gathered and investigated.

RESULTS: The most widely recognized causative medication was co-trimoxazole in 34 patients (87.17%), trailed by anti-inflammatory medicine in 2 (5.12%) patients, norfloxacin and erythromycin, each utilized by 1 patient (2.56%). A maximum number of patients had lesions on the glans penis (n=30) (76.92%). Hyperpigmented macular lesion were available in 23 patients (58.97%). The most widely recognized side effects which were introduced by the majority of the patients were pruritus (n=29) (74.35%), trailed by a consuming sensation (n=25) (64.10%).

CONCLUSION: We would like to conclude that co-trimoxazole was the main causative agents of FDE and the most common site was Glans penis in male and in females Vagina and Vulva was the most common site.

KEYWORDS: Genital lesions, Fixed drug eruptions, Hyperpigmented macular patches.

INTRODUCTION

Fixed drug eruptions (FDEs) were accounted for to be the most widely recognized cutaneous unanticipated medication response in an Indian report. Drugs enmeshed in causing FDE have changed after some time, and this study targets understanding these trends [1]. Fixed drug eruption (FDE) is an extraordinary unanticipated response to medications, introducing as oval, erythematous patches in similar site or locales each time the dependable medication is regulated. Mucosal regions, especially male private parts, are inclined toward locales. It appears to be that the occurrence of FDE relies upon the recurrence of the organization of prescriptions in a given piece of the world [2,3].

Genital sores of any sort are a reason for disarray to the dermatologists, as a result of their fluctuating potential causes. Genital FDE, specifically, is the reason for trepidation in the victim. In this way, we led a review to decide the most widely recognized specialists and areas of contribution in fixed genital medication eruption.

RESULTS

The age range of the patients (n=39) was 17–60 years with a mean age ± standard deviation of 36.1±10.5 years. Among them, 35 were male and 4 were female. The time interval between drug exposure and the development of genital FDE ranged from 1 day to 7 days with an average of 2.80±2.1 days. A maximum number of patients had lesions on the glans penis (n=30) (76.92%).

Hyperpigmented patches were present in 23 patients (58.97%) (Table 1).

The most common symptoms which were presented by most of the patients were pruritus (n=29) (74.35%), followed by a burning sensation (n=25) (64.10%) (Table 1).

The most common causative drug was co-trimoxazole in 34 patients (87.17%), followed by aspirin 2 (5.12%) patients, norfloxacin and erythromycin, each used by one patient (2.56%).

DISCUSSION

Drug eruption alludes to an unforeseen cutaneous lesion that happens after a particular medication is controlled and is known to be the reason for ~2–3% of dermatological issues [4,5]. Maculopapular eruption is the most widely recognized sort of medication eruption; however, it is challenging for doctors to analyze and separate between rashes connected with irresistible circumstances. Albeit FDE is more uncommon, its finding is typically direct.

FDEs create as round, or oval erythematous patches with discrete edges, in single or various patches, and can happen as bullae in extreme cases. With rehashed FDE events, the number and size of patches will in general increment and they become hazier in variety. FDE as a rule
creates at 0.5–8 h after organization of a causative medication, with a mean beginning season of 2 h [6,7]. The FDE sores as a rule vanish ~3 weeks after cessation of the causative drug, however once in a while cause skin pigmentation [4]. In this review, over portion of the patients showed pigmentation just at their most memorable clinic visit, and this was 2 years after their underlying FDE site effects [8].

As indicated by a few investigations, the most widely recognized medicine causing FDE are antibiotics (trimethoprim-sulfamethoxazole, antibiotic medication, penicillin, and erythromycin), followed by non-steroid mitigating drugs (diclofenac sodium, headache medicine, naproxen, and ibuprofen) [9,10]. The discoveries of this study showed that the major causative medication for FDE of the male genitalia was co-trimoxazole which is in concordance with the discoveries of different examinations Different medicines more generally connected with FDE of the penis incorporate antibiotic medications, acetaminophen, and purgatives containing phenolphthalein [11]. Segregated association of the glans penis in 30 patients was generally because of co-trimoxazole in one series. A few examinations have recommended a huge connection between unambiguous medicines and the clinical example and anatomic circulation of the sores in FDE, such as antibiotic medication including just the male genitalia, while co-trimoxazole influencing private parts notwithstanding other anatomic regions [12,13], however a by and large critical relationship has not been laid out [14]. An instance of one-sided non-pigmenting FDE in both the genital and extra genital regions has been accounted for because of co-trimoxazole.

**CONCLUSION**

We would like to conclude that co-trimoxazole was the main causative agents of FDE and the most common site was Glans penis in male and in females Vagina and Vulva was the most common site.

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**AUTHORS CONTRIBUTION**

All authors have equally contributed in this study.

**CONFLICT OF INTEREST**

None.

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Nil.

**REFERENCES**


### Table 1: Characteristic features in patients with fixed drug eruptions

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Site and type of lesion</th>
<th>n (%)</th>
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</thead>
<tbody>
<tr>
<td><strong>Type of lesion</strong></td>
<td>Hyperpigmented patches</td>
<td>23 (58.97%)</td>
</tr>
<tr>
<td></td>
<td>Maculovesive</td>
<td>4 (10.25%)</td>
</tr>
<tr>
<td></td>
<td>Bullous</td>
<td>3 (7.69%)</td>
</tr>
<tr>
<td></td>
<td>Erythematous patches</td>
<td>10 (25.64%)</td>
</tr>
<tr>
<td><strong>Site of genital lesions</strong></td>
<td>Prepuce</td>
<td>4 (10.25%)</td>
</tr>
<tr>
<td></td>
<td>Penile shaft</td>
<td>2 (5.12%)</td>
</tr>
<tr>
<td></td>
<td>Glans</td>
<td>30 (76.92%)</td>
</tr>
<tr>
<td></td>
<td>Scrotum</td>
<td>2 (5.12%)</td>
</tr>
<tr>
<td></td>
<td>Vagina</td>
<td>1 (2.56%)</td>
</tr>
<tr>
<td></td>
<td>Vulva</td>
<td>2 (2.56%)</td>
</tr>
<tr>
<td><strong>Extra genital lesion</strong></td>
<td>Cutaneous</td>
<td>10 (25.64%)</td>
</tr>
<tr>
<td></td>
<td>Oral mucosa</td>
<td>5 (12.8%)</td>
</tr>
<tr>
<td><strong>Symptoms</strong></td>
<td>Pruritus</td>
<td>39 (74.25%)</td>
</tr>
<tr>
<td></td>
<td>Burning sensation</td>
<td>25 (44.10%)</td>
</tr>
<tr>
<td></td>
<td>Pain</td>
<td>12 (20.76%)</td>
</tr>
<tr>
<td></td>
<td>Burning micturition</td>
<td>4 (10.25%)</td>
</tr>
</tbody>
</table>