

## CASE REPORTS

### COTRIMOXAZOLE RESISTANT CHANCROID (Report of four cases)

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Four male young adults, after contact with prostitutes, developed clinically typical chancroid which was resistant to cotrimoxazole alone and also in combination with tetracycline. With chloramphenicol, the response was quick and complete with no untoward side effects.

**Key words :** Chancroid, Resistance.

Chancroid is a common venereal disease in our country. So far, its management has not posed major problems. Sulphonamides have continued to be the drug of choice. Other drugs like cotrimoxazole,<sup>1-3</sup> tetracycline,<sup>4-7</sup> aminoglycosides,<sup>8-9</sup> cephalosporins<sup>10</sup> and chloramphenicol have also been found to be effective. Some of these have not been preferred as a first line of drug, for these either mask concomitant syphilis and/or have unacceptable side effects. Treatment failures with sulphonamides alone, tetracyclines alone<sup>2,12</sup> and combination of sulphonamides and tetracyclines have been reported.<sup>8,10</sup> We are reporting four cases who failed to respond initially to co-trimoxazole alone and subsequently to a combination of tetracycline and cotrimoxazole.

#### Case Reports

##### Case 1

A 20-year bachelor developed a 5 mm sized ulcer on the coronal sulcus 10 days after his first and the only heterosexual contact with a prostitute. Right side inguinal lymph nodes

were enlarged, discrete, tender with normal overlying skin. During 24 days of therapy with cotrimoxazole, lymphadenopathy regressed but the existing ulcer enlarged and 4 new ulcers appeared in its vicinity. Ulcers continued to enlarge in size during another 24 days of therapy with cotrimoxazole and tetracycline. Complete healing occurred in 10 days of chloramphenicol therapy.

##### Case 2

A 23-year-old male, divorced for six months, had developed an ulcer on the inner surface of his prepuce near the coronal sulcus 5 days after contact with a prostitute. Two days later, he had begun developing a swelling in the left inguinal region. The ulcer had healed over a period of 4 weeks but the bubo had ulcerated which subsequently developed many satellite ulcers. At this stage, after the penile ulcer had healed and 40 days after ulceration of the bubo, the patient presented to us. In the preceding period he had taken some indigenous treatment without apparent relief. He had scar of a healed ulcer on the inner surface of his prepuce near the coronal sulcus and a 2 cm × 2 cm chancroid with ragged undermined margin surrounded by numerous 2 to 3 mm superficial, necrotic, non-indurated and tender ulcers. Patient was febrile and had a slight flexion at the left hip

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joint. During 21 days of therapy with cotrimoxazole, the ulcers increased in size and number. There was no change during 25 days of cotrimoxazole and tetracycline combination therapy, but complete healing occurred in 10 days with chloramphenicol therapy.

### Case 3

A 22-year old bachelor male developed three, 5 mm to 10 mm ulcers on the inner surface of prepuce 10 days after his first heterosexual contact. During 21 days of treatment with cotrimoxazole, another similar ulcer appeared on the prepuce. Clinical picture remained unchanged during 14 days of therapy with cotrimoxazole and tetracycline, but the ulcers healed within 7 days of treatment with chloramphenicol.

### Case 4

A 26-year old male bachelor developed several 2 mm to 3 mm ulcers on the frenum 3 days after his first heterosexual contact with a prostitute. Right inguinal lymph nodes were enlarged, matted and tender. The ulcers increased and bubo enlarged during 28 days of therapy with cotrimoxazole, but remained unchanged during 14 days of combined therapy with cotrimoxazole and tetracycline. Ultimately, all the ulcers healed in 7 days with chloramphenicol.

In all the above 4 cases, ulcers were oval, superficial, tender, non-indurated, with ragged undermined edges, and necrotic slough and bled on manipulation. In all the cases, smears from the undermined edge of the ulcers revealed Gram negative rods in a "school of fish" (Fig. 1). Repeated tissue smears and D G examination for Donovan bodies and *Treponema pallidum* respectively were negative. VDRL on the initial visit, on the 15th day and the 60th day was non-reactive. In all, cultures for *Hemophilus ducreyi* were negative. All the 4 cases received 2 tablets of cotrimoxazole, each consisting of trimethoprim 160 mg and sulphamethoxazole 800 mg, daily for 3 to 4 weeks, followed by

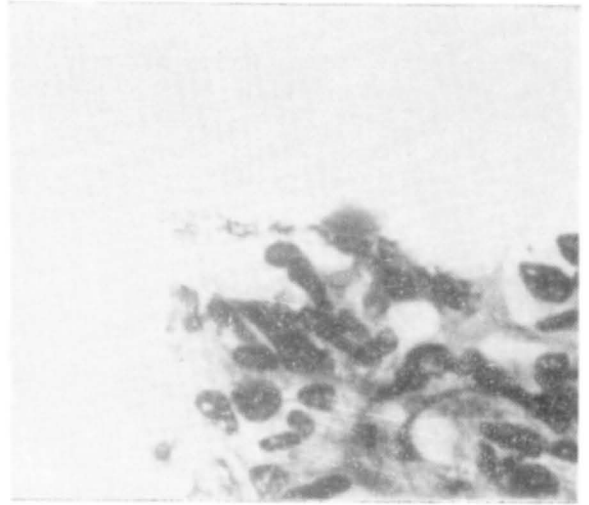


Fig. 1. Gram negative bacilli in a smear from the undermined edge of the ulcer.

combination of the same dose of cotrimoxazole with capsule tetracycline 500 mg every six hours for 14 to 25 days. Finally, capsule chloramphenicol was given in the dose of 500 mg six hourly for 7 to 10 days. Hemogram done before, during and after chloramphenicol therapy was found to be normal.

### Comments

The diagnosis was made on the basis of characteristic clinical lesions, demonstration of *Hemophilus ducreyi* in smears from the ulcers and repeated negative tissue smears and dark ground examinations for Donovan bodies and *Treponema pallidum* respectively. Although it is generally felt that it is difficult to demonstrate *H. ducreyi* in majority of cases, it is our experience that a thorough survey of properly made smears from the undermined edge seldom fails to reveal *Hemophilus ducreyi*.

There was no improvement during therapy with cotrimoxazole alone or when used in combination with tetracycline. The ulcers either remained static or increased in size during treatment with cotrimoxazole or during combination therapy. Combination of tetracycline

and sulfonamide has been reported to be effective when either of them alone has failed. Treatment failures even with combination of sulfonamides and tetracyclines have been reported.<sup>8,10</sup> Some workers have reported hundred per cent response to cotrimoxazole even in cases resistant to other drugs, though Rajan and Pang<sup>13</sup> reported failure in three cases. Response to chloramphenicol was good and rapid and there were no untoward side effects.

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