

# ✓ GRANULOMA VENEREUM TREATED WITH "REVERIN"

By

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Granuloma Venereum is endemic in India in the States of Andhra Pradesh, Madras and Orissa. The maximum incidence of the disease is found along the eastern sea coast. Granuloma Venereum is endemic in the Guntur District of Andhra Pradesh and the highest number of cases seen in a five year period was reviewed and reported from Guntur by the senior author.

Granuloma Venereum typically manifests as a velvety granulomatous ulcer with hypertrophic irregular margins. It is interesting to note that from time to time we come across lesions with great variations in the clinical picture. It may range from a tiny pea sized almost erosive looking lesion to recently healed scar-like lesions from which Donovan organisms have been demonstrated. Any chronic genital ulcer with little or no regional inguinal lymphadenopathy irrespective of the clinical features should be investigated for Granuloma Venereum. The diagnosis should always be confirmed by demonstrating the Donovan organisms in the tissue smears. The epidemiological studies of the disease still defies proper understanding inspite of extensive investigations.

In 1913 ARAGAG and VIANNA introduced the antimonials in the treatment of granuloma venereum and antimony compounds were the specific drugs used till 1947. The disadvantages with antimony treatment were:—

1. Toxicity of the drug.
2. They activate latent tuberculosis.
3. Lesions broke down after apperant healing.

In 1947 BARTON and his associates introduced Streptomycin in the treatment of Granuloma Venereum and since then streptomycin has been the drug of choice.

This study has been undertaken because of the fact that more and more cases of Granuloma Venereum are becoming resistant to the standard streptomycin therapy and moreover the drug itself is causing frequent toxic rections like tinnitus, vertigo and vomiting which sometimes necessitates discontinuance of the drug in the middle of the treatment.

*Reverin (Hoechst)*. Is a broad spectrum antibiotic of the tetracycline series. Reverin is a highly soluble pyrolidenomethyl compound of tetracycline. Serum

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concentration after intramuscular injection in man indicate that reverin gives serum levels that are about twice as high as those obtained with currently available intramuscular tetracycline forms (KAPLAN, 1959).

CASE REPORTS

Case I. M. V. 852/68 Male 39 years.

- 1. Extensive granulomatous ulcer of the anal and perianal region extending over the perineum, 8" x 6" in size of 5 months duration.
- 2. Granulomatous ulcer 2" x 1" on the right side of the neck of 3 months duration.

INVESTIGATIONS

- 1. Blood V. D. R. L. .... Negative.
- 2. Smear for D. B. .... Positive both from anal region and neck.

Treatment. 1. Streptomycin I. g. I. M. twice a day for 20 days, a total of 20 g. No appreciable improvement was noticed in the lesions and it was suspected to be resistant to Streptomycin. Smear for D. B. was repeated and it was found positive.

Reverin. 2. 150 mgm. was given I. M. twice a day for 10 days and smear for D. B. was found to be negative. The lesions also showed signs of healing. A further 20 Vials of Reverin were given.

Result. The lesions completely healed with a total of 40 vials of Reverin.

Case II. M. V. 1846/68 Male 45 Years. Granulomatous ulcer prepuce 2" x 1" in size and of 2 months duration.

INVESTIGATIONS

- 1. Blood V. D. R. L. .... Negative.
- 2. Smear for D. B. .... Positive.

Treatment. Reverin 150 mgms I. M. twice a day for 10 days a total of 20 vials.

Result. The lesion completely healed.

Case III. M. V. 2010/68 Male 40 years Granulomatous ulcer penis 2" x 2" in size of 1 year duration.

INVESTIGATIONS

- 1. Blood V. D. R. L. .... Negative.
- 2. Smear for D. B. .... Positive.

Treatment. Reverin 150 mgm I. M. twice a day for 10 days.

Result. Lesion completely healed.

Case IV. M. V. 1258/67 Male 50 Years. Multiple Granulomatous ulcer inside the prepuce.

INVESTIGATIONS

- 1. Blood V. D. R. L. .... Negative.
- 2. Smear for D. B. .... Positive.

*Treatment.* 1. Streptomycin 1 g. I. M. twice a day for 20 days, a total of 40 g. There was no appreciable improvement in the lesions. Smear for D. B. was repeated and was found positive.

2. Reverin 150 mgm I M. twice a day for 12½ days 25 Vials.

*Result.* The lesions completely healed.

*Case V.* F. V. 218/67 Female 25 Years. Granulomatous ulcer right labia 3" x 2" of 3 months duration.

#### INVESTIGATIONS

1. Blood V. D. R. L. .... Negative
2. Smear for D. B. .... Positive.

*Treatment.* Reverin 150 mgm. I. M. twice daily for 10 days 20 vials.

*Result.* Lesion completely healed.

*Case VI* F. V. 586/68 Female 15 years. 3 Granulomatous ulcers left labia minora and fourchette of 7 days duration.

#### INVESTIGATIONS

1. Blood V. D. R. L. .... Negative
2. Smear for D. B. .... Positive

*Treatment.* Reverin 150 mgm I. M. twice a day for 10 days 20 vials.

*Results.* Lesions completely healed.

*Case VIII.* F. V. 610/68 Female 25 years Granulomatous ulcer left labia majora 2" x 1" with pseudoelephantiasis of left labia minora and clitoris. The ulcer was of 15 days duration.

#### INVESTIGATIONS

1. Blood V. D. R. L. .... Positive 16 Dilutions.
2. Smear for D. B. .... Positive.

*Treatment.* 1. P. A. M. 2 c. c. I. M. daily for 10 days.

2. Reverin 150 mgm. I. M. twice a day for 12½ days total 25 vials.

*Results.* The granulomatous ulcer healed completely and pseudoelephantiasis improved slightly.

The above seven cases of Granuloma Venereum were treated with Reverin 150 mgm. I. M. twice a day. Out of the 7 cases two were resistant to the Streptomycin therapy. All the cases responded uniformly well and the Donovan Bodies were absent in the tissue smears within 10 days of treatment. (20 vials of Reverin).

The response to treatment with two vials of reverin per day was so good that we decided to make a clinical trial of treating Granuloma Venereum with only one vial of Reverin 150 mgm. I. M. per day in the following cases :

*Case VIII.* F. V. 690/68 Female 45 Years. Granulomatous ulcer left labia majora and fourchette 3" x 2" of 2 years duration.

## INVESTIGATIONS

1. Blood V. D. R. L. .... Positive 8 Dilutions.
2. Smear for D. B. .... Positive.

*Treatment.* 1. I. A. M. 2. c c. I. M. daily for 10 days.

2. Streptomycin I. g. twice a day for 10 days. No. clinical improvement in the lesion seen. Smear for D. B. repeated and found to be positive.

3. Reverin 150 mgm. I. M. once a day for 10 days.

*Result.* Lesion completely healed.

*Case IX.* F. V. 927/68 Female 20 years. Granulomatous ulcer "U" shaped involving both labia majora and fourchette 4" x 1½" of 1 year duration. Pseudoelephantiasis of right labia majora.

## INVESTIGATIONS

1. Blood V. D. R. L. .... Positive 8 Dilutions.
2. Smear for D. B. .... Positive.

*Treatment.* 1. P. A. M. 2. c. c. I. M. daily for 10 days.

2. Reverin 150 mgm. I. M. daily for 10 days.

*Result.* Even with five injections of Reverin the lesion showed good improvement and with 10 injections, the lesion completely healed.

*Case X.* F. V. 951/65 Female, 20 years. Granulomatous ulcer "U" shaped involving both labia majora and the fourchette 5" x 1½" of 3 months duration.

## INVESTIGATIONS

1. Blood V. D. R. L. .... Negative.
2. Smear for D. B. .... Positive.

*Treatment.* Reverin 150 mgm. I. M. daily for 10 days.

*Result.* The lesion completely healed.

*Case XI.* F. V. 1012/68 Female 45 Years. Granulomatous ulcer lower part of right labia majora extending to the fourchette 2½" x 1" of 1 month duration.

## INVESTIGATIONS

1. Blood V. D. R. L. .... Negative.
2. Smear for D. B. .... Positive.

*Treatment.* Reverin 150 mgm. I. M. daily for 10 days.

*Result.* The lesion healed completely.

*Case XII.* M. V. 3735/68 male 30 years. Granulomatous ulcer at the fraenal region 1" x 1" of 1 month duration.

## INVESTIGATIONS

1. Blood V. D. R. L. .... Positive 32 Dilutions.
2. Smear for D. B. .... Positive.

*Treatment.* 1. P. A. M. 2. c. c. I. M. daily for 10 days.

2. Streptomycin 1. g. I. M. twice a day for 10 days. There was no improvement in the lesion and the tissue smear repeated was positive for Donovan organisms.

3. Reverin 150 mgm I. M. daily for 10 days,

*Result.* Lesion Completely healed.

*Case XIII.* F. V. 1068/68 Female 21 Years. Granulomatous ulcer inside right labia minora 2" x 1" of 15 days duration slight psendoeiphantiasis of the clitoris present.

#### INVESTIGATIONS

1. Blood V. D. R. L. .... Positive 4 Dilutions.

2. Smear for D. B. .... Positive.

*Treatment.* Reverin 150 mgm. I. M. daily for 10 days.

*Result.* The lesion healed completely. The elephantiasis of the clitoris much reduced.

*Case XIV.* M. V. 4150/68 Male 30 years, Granulomatous ulcer perianal region on the right side 3" x 1½" of 6 months duration no genital lesion.

#### INVESTIGATIONS

1. Blood V. D. R. L. .... Negative.

2. Smear for D. B. .... Positive.

*Treatment.* Reverin 150 mgm. I. M. daily for 10 days.

*Result.* The lesion completely healed.

*Case XV.* F. V. 1106/68 Female, 25 Years. Multiple Granulomatous ulcers right labia majora, right labia minora and fourchette of 10 days duration.

#### INVESTIGATIONS

1. Blood V. D. R. L. .... Negative.

2. Smear for D. B. .... Positive.

*Treatment.* Reverin 150 mgm. I. M. daily for 10 days.

*Result.* Lesions completely healed.

*Case XVI.* F. V. 1118/68 Female. 30 Years. Granulomatous ulcer 1" x 1" on the left labia majora of 10 days duration.

#### INVESTIGATIONS

1. Blood V. D. R. L. .... Negative.

2. Smear for D. B. .... Positive.

*Treatment.* Reverin 150 mgm. I. M. daily for 10 days.

*Result.* The lesion healed completely.

## SUMMARY

✓ A total of 16 cases of Granuloma Venereum were treated with Reverin.

seven 7 of the cases were treated with Reverin 150 mgm twice a day. Two of the 7 cases were resistant to streptomycin. All the cases responded uniformly well to reverin therapy.

Nine 9 of the cases were treated with a single injection of Reverin 150 mgm. I. M. per day. 2 of the nine cases were resistant to the Streptomycin therapy. All the cases respondend well to Reverin therapy. ✓

## CONCLUSION

From the above study, we are of the opinion that Reverin is an ideal drug in the treatment of Granuloma Venereum. All the cases, including the Streptomycin resistant cases responded well to treatment. None of the patients developed sensitivity to the drug.

There were no resistant cases to reverin therapy in the series. Reverin Injections were well tolerated.

As Streptomycin has to be given twice a day, the routine practice with us is to admit every case in to the Hospital for treatment. Most of the patients belong to the lower socio-economic group and mostly comprise of daily wage earners who are disinclined to be admitted in to the Hospital for treatment.

Single Injection treatment of Reverin per day not only makes the cost of the treatment comparitively cheaper but also renders out-patient treatment of Granuloma Venereum possible. The majority of the cases of Granuloma Venereum require a total of 10 injections of Reverin.

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