# GRANULOMA VENEREUM-A RETROSPECTIVE STUDY

By

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The presenter of this note is deeply indebted for the opportunity afforded him to review in retrospect the outcome of therapy of a selected series of cases of granuloma venereum nee Donovanosis, that came under his purview during the past decade.

As preface to this presentation, the following remarks are offered:

Donovanosis, as one among the tropical venereal granulomas, has hitherto received scant attention of our people judged from the prognostic and epidemiological angles. The main cause singled out among many for this 'pass over' is that all the epidemiological services available at the Clinic have been monopolised for the control of syphilis-the venereal treponematosis-that has always, from the public health point of view, enjoyed the prerogative of preference and priority over the remaining communicable diseases.

Other reasons adduced are:

that this infection occurs largely amongst people of a very low socio-economic order, who, because of their intelligence being what it is, live in complacence with the infection without being roused to realise the importance of tackling it even in advanced phases;

that the proportionate incidence of granuloma venereum has been fairly low and in some parts of India the disease entity has not even been reported on to require the needed special attention;

that granuloma venereum is not transmissible for the woman patient across the placenta to her offspring;

that as a rule, granuloma venereum, though on a rare occasion, systemic, vide review of a case report, presents the early lesion almost always about the genitalia, which is commonly taken for early syphilis and treated as such; it is only later when therapy fails or under the untreated circumstances, inguinalisation occurs, as in the male, that the diagnosis of granuloma venereum is prompted;

that granuloma venereum, early or late, is a progressive chronic inflammatory disease, with just a monotonous quantitative difference between the early and the late phase unlike in luetic infection in which the qualitative and morphologic distinction is the hallmark of the different phases;

that in the matter of diagnosis of granuloma venereum when one is unable to demonstrate the causative agent in Leishman's stained granulomatous tissue, pinched out of the lesion with a pair of forceps, preliminary penicillin medication controls the concurrent banal infection and helps to discover the lurking Donovania granulomatis. But and if no lesions exist at all or if the lesional material is

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negative for Donovania granulomatis, appropriate cultures and specific cuti and complement fixation tests, if made available in our country, at least 57 years after the discovery of Donovania Granulomatis in Madras Govt. General Hospital by Col. Donovan, will pave the way to determine the latent existence of the infection in the person and perhaps provoke the answer to the yet unsolved puzzle as to whether granuloma venereum is venereal or non-venereal.

It is in this context that the retrospective study has been conducted to determine.

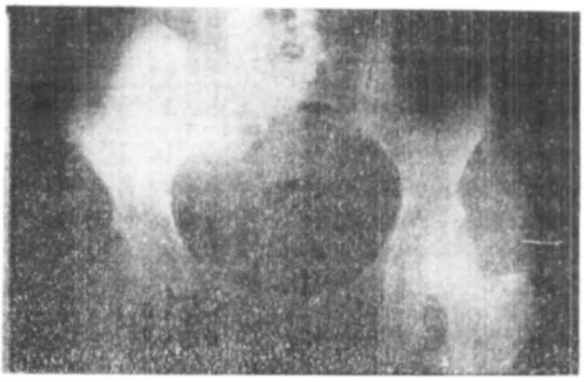
1. If the satisfactory therapeutic response in granuloma venereum is permanent after the administration of the antibiotic streptomycin which is cheap, safe and efficacious;
2. if there is any relapse;
3. if there is any spontaniety of cure without treatment;
4. if there is any case of true re-infection;
5. if non-treatment of an apparently normal sexual partner results in overt infection in the person at a later stage;
6. if in any one single person treated, the granuloma venereum ultimately undergoes malignant degeneration;
7. If there were any remote major toxicity or hyper-sensitivity reactions exhibited by the patients treated; and
8. if there were any therapeutic paradox in the treated series.

## MATERIALS AND METHODS

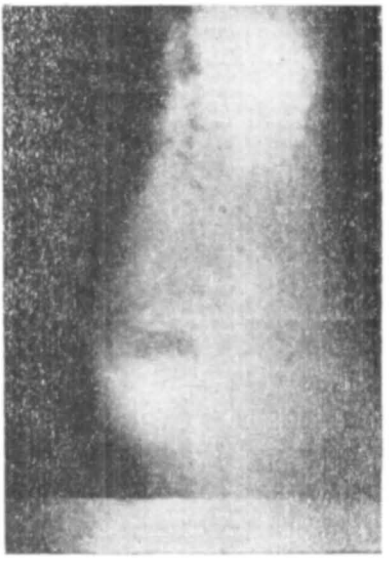
With the express purpose of unravelling the problems posed above, the meagre services of the available social workers were at once requisitioned for a blitz study of 101 cases of 1952 and a few others, of different other years.

The nominal registers for the different years were sought, the V. D. O. P. numbers bearing the diagnosis of granuloma venereum, were jotted down; the relevant cards were then collected from the card racks, the mufassalites were sorted out as apart from the metropolitans, letters were written, to those outside our reach and personal contacts were attempted in regard to the city dwellers. Unfortunately the addresses given by the patients were most often fictitious. At this late period of reference it seems as if the abodes referred to never existed at all, or had been destroyed and not rebuilt; if the living places did exist, the required persons were not there; if they were there, strangely enough, they did not admit having attended the V. D. Deparament at any time; if they did admit the fact of having done so, they refused to go to the hospital as they were well. Despite these multifarious hurdles in epidemiology 10 were ultimately available for this study at the Institute.

*Case 1*: A married woman "K" V. D. O. P. No. 5515/53, nearly 8 years after publication of the case report entitled 'systemic donovanosis' in whom the



Case No. 1 (b)



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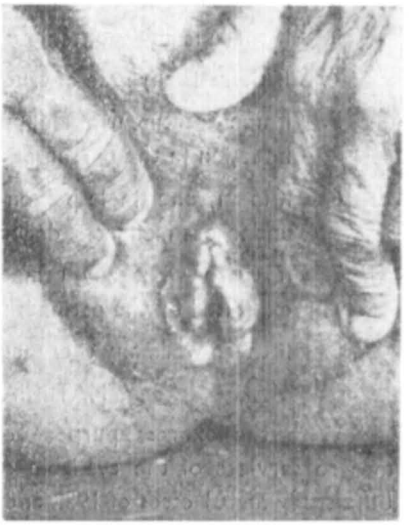
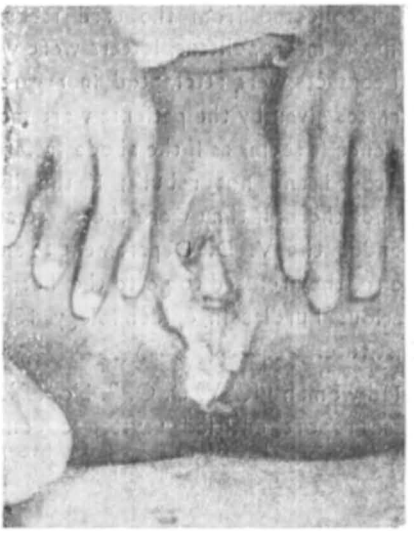
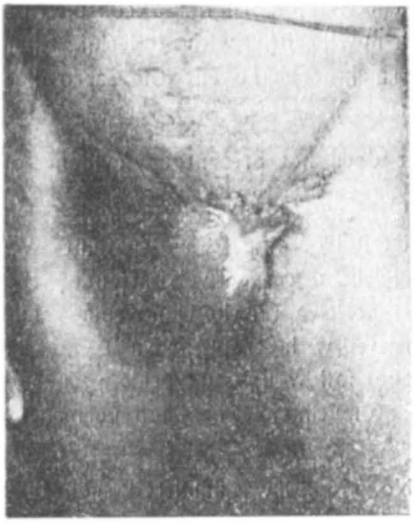


Case V

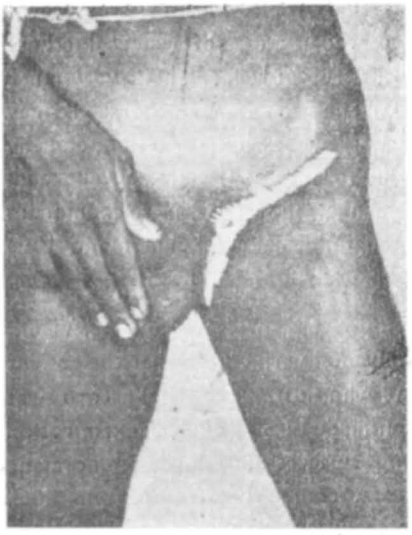
Case VI



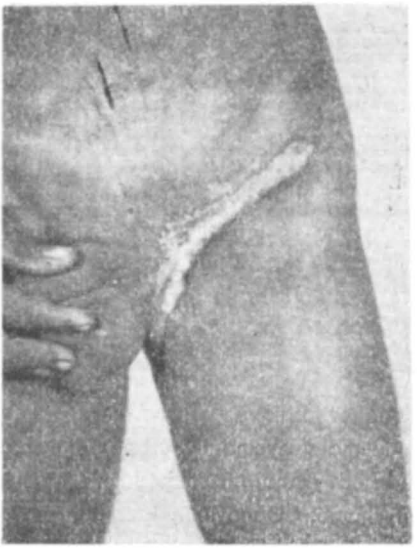


Case VII

Case VIII (a)



Case VIII (b)



Case VIII (c)

causative organism was demonstrated in the tibial tissue, cervical material, urinary bladder and liver biopsy material reported for check up, more for a consultation regarding her offspring than for herself. She is now healthy, with no lesions, her chest skiagram taken for lungs reveals nil abnormal, her spine and the sacro-iliac joints do not reveal any abnormality ( vide pictures ).

Mantoux test—negative and the patient does not present any evidence of tuberculosis.

*Case II*: Patient "V" female 30 years VDOP No. 4715/52 and patient "V" male 40 years VDOP No. 9462/52, wife and husband respectively attended the Institute of Venereology with genital ulcers, positive for the Donovania granulomatis in March 1952. Both of them were treated with Streptomycin 20 G. each. The genital ulcers healed. They were brought for follow-up study this year and and found to maintain normal health. The streptomycin effect has been permanent in conjugal venereal granuloma.

*Case III*: Patient "M" 34 years VDOP No. 3965/51 was admitted seen first on 31st March 1951, with an ulcer in the coronal sulcus and the adjoining prepuce; pseudo bubo left groin. The relevant laboratory findings were blood Kahn and Wassermann negative. Ulcer smear positive for Donovania granulomatis. Urine showed threads. Urine sediment revealed pus cells and other organisms. The patient was treated with 20 g. streptomycin sulphate and was discharged on 17-4-1952, certified ' healed '.

He returned this year with a genital scar and multiple hemispherical tumours about the skin of limbs. Blood VDRL negative Histopathological study of tumour reveals a ' lipoma '. The urine shows threads and the urine sediment pus cells and secondary organisms. V. G. may come and go but N. G. U. remains !

*Case IV*: One particular patient was graded elsewhere as a case of cancer on clinical and histopathological bases but was treated as a case of venereal granuloma in 1950 at the Institute of Venereology with streptomycin. She is very much alive to-day, it is only her husband who is dead. She has taken another. To-day she has no evidence of granuloma venereum except the scar of past lesion, and the new husband of several years' standing is clinically free from granuloma venereum testifying to the husband test of cure. The woman is infested with trichomonads for which she and her husband on suspicion, though normal at the moment, have both been out on Flagyl, 200 mg. tablets t. d. per orally for 7 days.

*Case V*: Patient ' N. M. ' female aged 50 years, widow 15 years, VDOP No. 3913/61 was referred from a neighbouring hospital with a note that the patient has suffered from a vulval ulcer for 2 years and the histopathologic record was epidermoid carcinoma and no definite infiltration made out. Clinical examination revealed granulomatous ulcer of the apposing surfaces of both labia minora and fourchette. Donovania granulomatis positive. A course of streptomycin 20G. administered. The lesion subsided and the patient was discharged.

*Case VI*: Patient 'N' 22 years female VDOP No. 549/60. Ulcer external genitalia one month. Dark-field negative. Smear for D. B. negative. Blood VDRL test negative. She had a course of sulphonamide by mouth. The patient left before the ulcer was completely cured but returned 9 months later with a scar fourchette. She made a third appearance on 3-12-1961 with pregnancy of 8 months' duration and an ulcer on the left side of the fourchette. Before investigations could be completed the patient developed labour pains and was transferred to another hospital. Pregnancy over, she returned with a baby, an unhealed vulval ulcer and a puzzling pathologic report suggestive of malignancy. Deep scrapings revealed Donovania granulomatis and the patient was treated with streptomycin 20G. The ulcer healed. She was seen again recently and she maintains normalcy.

*Case VII*: Patient 'K' male 26 years, married VDOP No. 2438 62 has suffered from genital ulceration for the past 1½ years. The penis was amputated a year ago on the supposition that the lesion savoured of a malignant disposition! On examination the vestiglal post operative granuloma was venereal granuloma itself with Donovania Granulomatis in the smears and the biopsy confirmed the diagnosis. The patient was put on streptomycin 1G. b.d., I.M., for 10 days with prompt relief but can the patient recover what he has lost? Plastic Surgeons, will you help?

*Case VIII*: Patient 'P' male aged 25 years, married, VDOP No. 5011/54 reported first with a penile sore three months and burst bubo 20 days. On clinical examination the patient was observed to have a concealed ulceration behind the edge of the phimotic prepuce at 10-12 o'clock position. Bubo left groin was tender and fluctuant. Bubo right groin had burst at two points. Smears from penile and groin lesions revealed Donovania granulomatis. Blood VDRL slide test was reactive in 128 dils. Other investigations irrelevant. The patient was diagnosed as suffering from granuloma venereum and was treated with 20G. of streptopenicillin. Circumcision done. He was discharged when the groin lesions had almost healed.

The patient appeared again on 6-11-56 with recurrent ulcer groins. Donovania granulomatis present again. Streptopenicillin 20G. repeated only to get us disappointed with the reappearance of the Donovania granulomatis in the smear.

He was this time administered Chloramphenicol I.M., daily for 10 days. The lesion healed and the patient was discharged. This patient reported on 14-2-60 with a large granulomatous ulcer left groin. He was put again on one ampoule of Reverin I.V., daily for 10 days. The ulcer completely healed. Further follow-up is not available.

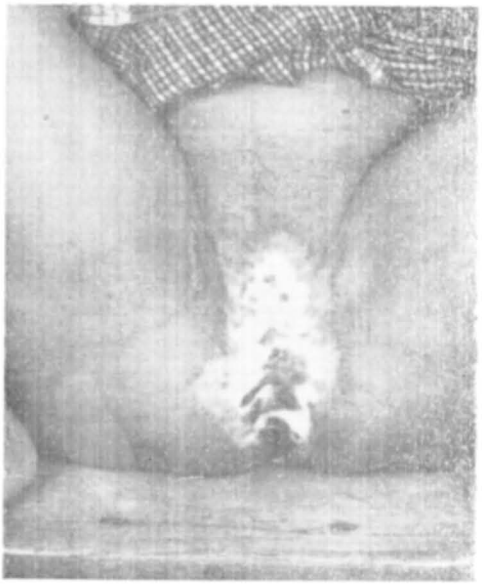
*Case IX*: Patient 'V' male aged 25 years, unmarried, cooly by profession, VDOP No. 2167/55 has been on our records since 15-3-55. He reported with a granulomatous ulcer in the right groin of a years' duration. The only positive laboratory finding was that Donovania granulomatis was present in the tissue smears. He was given streptomycin as per standard schedule. Ulceration almost

healed when he got himself discharged but the healing was never complete. The breakdown usually occurred at the site of the scar revealing the causative agent in the granulomatous tissue. 14 times in seven years he had attended and on every attendance the organism was present. The following treatment was administered during this long period :

Streptopenicillin.
Anthiomaline.
Tartar emetic
Fouadin.
Omnamycin.
Synthomycetin.
Cortisone.
Streptomycin.
Superficial x-ray therapy.
Reverin.
Chloromycetin.
Streptomycin.

Patient went away with a refractory lesion.

*Case X*: Another interesting case worthy of presentation is that of a woman patient who did well. Healing in venereal diseases however means a scar and the



Case X

scar in this particular woman has been an adhesion between the labiae in such a way that there is no visible vaginal outlet. Even the external urinary meatus cannot be made out though the urine trickles from somewhere near the perineum, close to the anus. (VDOP No. 5012/52)

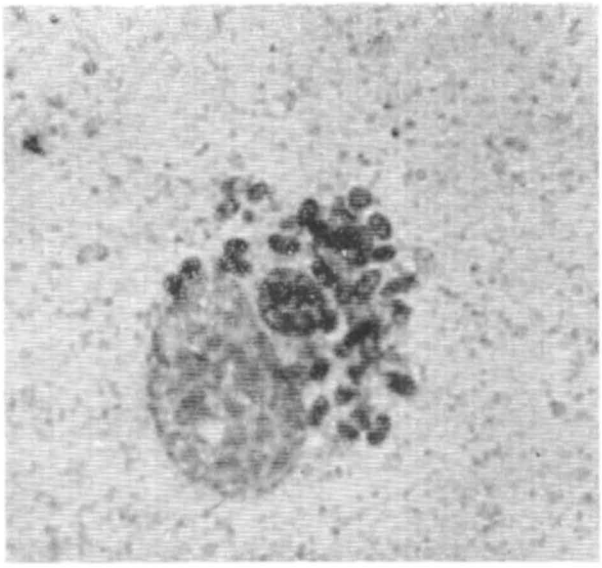
She has attained her menopause and is living with her husband. Her children are alive and well. She has declined any surgical interference.

This is an outstanding example of a therapeutic paradox.

## HIGHLIGHTS OF THE STUDY WITH REMARKS

1. Ten patients available for review in person and others through correspondence, had done well, except case IX.

2. Not a single patient, who after complete investigation had not undergone treatment, was available for study and appreciation of the natural course of untreated granuloma venereum.



3. A few cases that were diagnosed as cancer on morphologic and histopathologic grounds but treated as granuloma venereum on smear diagnosis were available for study vide case reports appended.

4. None appeared with any evidence of a permanent toxic effect due to the specific treatment administered in the past.

5. The case history of a case of relapse is appended.

6. No case history of reinfection is available.

7. A case history of treatment resistence is attached.

8. The case history depicting a therapeutic paradox with obliteration of the vaginal orifice is appended.

This retrospective study has shed light on very many aspects of granuloma venereum hitherto not very clear. What requires most attention is the study of the organism in order that treatment resistance, latent granuloma venereum and therapeutic paradox in it may be resolved.