AUREOMYCIN IN TRACHOMA*

BY

J. W. R. SARKIES

Gold Coast Hospital, Accra.

REPORTS on the treatment of trachoma with aureomycin are still limited in number, and opinions on the efficacy of the drug in this condition are conflicting. Moutinho and others (1949) and Duke-Elder, Ainslie, and Boase (1950) gave favourable reports; Boase (1950) in a second report considered that the effect was no more than ameliorative, and this view has been supported by Shah (1951), using retrogression of pannus as a criterion of cure.

In the Gold Coast, trachoma appears to run a relatively benign course compared with the disease as I have seen it in India and Burma; amongst the people of the humid forest and coastal areas it is largely self-limiting.

MATERIAL

The following series of 62 cases was drawn from patients presenting themselves for treatment, with symptoms of a varying degree of secondary infection. Of these cases, 31 (Series A) were treated with aureomycin and the other 31 (Series S), as controls, with sulphadiazine, the two methods of treatment being employed alternately; all had typical pannus and this was regarded as a diagnostic necessity, conjunctival scrapings were not examined for inclusion bodies.

THERAPY.—In Series A, cases were admitted to hospital and crystalline aureomycin ointment 0.1 per cent. (Lederle) was inserted under the upper and lower lids six times daily; in two of this series aureomycin was also given by mouth, the dosage being 1.5 g. daily for 5 days.

In Series S, a 30 per cent. sulphadiazine ointment was inserted in the same way but only once daily, and this group was not admitted to hospital. In all cases the tarsal conjunctiva and cornea were examined with slit lamp and corneal microscope before and after treatment, progress being assessed by appearance of the follicles, development of scar tissue, retrogression of pannus, and relief of symptoms.

* Received for publication March 29, 1951.

TABLE I
SERIES A—AUREOMYCIN THERAPY

Case No.	Age	Sex	Before Treatment				After Treatment				No. of days treatment
			Follicles	Pannus	Scarring	Symptoms	Follicles	Pannus	Scarring	Symptoms	
§A1	17	M	++	++	+	+	+	++	++	—	14
A2	32	M	+	+	—	+	—	+	—	—	21
§A3	25	M	+	++	++	++	+	++	++	—	16
A4	15	F	+	+	—	+	+	+	—	—	27
A5	45	F	+	++	+	++	+	++	++	—	16
A6	37	F	++	++	+	++	+	++	++	—	12
A7	56	F	+	++	++	+	+	++	++	—	16
A8	7	M	++	++	+	++	+	++	+	+	33
A9	21	F	++	++	++	+	++	++	++	—	30
A10	38	F	++	++	+	++	+	++	+	—	23
A11	6	F	+	+	—	++	—	+	—	—	18
A12	53	F	+	++	++	+	+	++	++	—	22
A13	12	F	++	+	+	+	+	+	+	—	16
§A14	28	M	++	++	+	+	+	+	+	—	12
A15	34	F	+	+	—	+	—	+	+	—	12
A16	26	F	++	++	+	+	+	++	+	—	21
A17	12	M	+++	+	—	+	+	+	+	—	35
A18	40	F	++	++	+	+	+	++	—	—	14
A19	32	F	+	+	—	+	+	+	—	—	8
*A20	50	F	++	++	+	++	—	+	+	+	12
A21	15	M	+++	—	+	++	+	+	—	—	14
A22	31	F	+	+	—	+	—	+	—	—	15
†A23	28	F	++	++	—	+	+	++	—	—	5
A24	7	M	+	++	—	+	+	+	—	—	10
A25	22	F	+	++	—	+	+	++	—	—	8
A26	43	F	+	+	++	+	+	+	++	—	19
A27	12	F	+++	+	+	+	+	+	+	—	20
*A28	53	F	++	++	++	++	—	++	++	+	12
†A29	9	M	++	+	—	+	+	+	—	—	6
A30	25	F	++	+	++	+	+	+	++	—	12
A31	10	F	+++	+	+	+	++	+	+	—	28

§ Onchocerciasis.

* Entropion.

† Requested discharge.

RESULTS.—These are summarized for individual cases in Tables I and II, symbols being used as follows:

- +++ Gross follicles covering most of the tarsal conjunctiva and easily visible to the naked eye,
 pannus involving at least half the cornea,
 gross scarring with lid deformity,
 symptoms of marked photophobia,
 lacrimation,
 severe irritation,
 ptosis.
- ++ Gross follicles visible to the naked eye, but confined to part of the conjunctiva only,
 pannus extending more than 3 mm. into the substantia propria.

TABLE II
SERIES S—SULPHADIAZINE THERAPY

Case No.	Age	Sex	Before Treatment				After Treatment				No. of days treatment
			Follicles	Pannus	Scarring	Symptoms	Follicles	Pannus	Scarring	Symptoms	
S1	29	M	++	++	+	+	+	++	+	—	26
S2	16	M	+	+	+	+	+	+	++	—	16
S3	40	M	+++	+	+	++	+	+	++	—	20
S4	23	M	+	+++	+++	+++	+	++	++	+	29
S5	28	M	++	++	++	+++	+	++	++	+	32
*S6	45	F	+	++	++	+++	+	++	++	+	46
*S7	37	F	++	++	++	+++	+	++	++	+	38
S8	36	M	+	++	+	+	+	+	++	—	44
S9	21	F	++	+	+	+	+	+	+	+	14
S10	58	F	+	+++	+	+++	+	+++	++	+	22
S11	11	F	++	++	+	++	+	++	++	—	41
S12	40	F	++	++	+	++	+	++	+	—	17
S13	38	F	++	++	++	++	+	++	++	—	21
S14	45	F	+++	+++	+	+++	+	+++	++	+	16
S15	9	M	++	++	+	+	+	++	+	—	15
S16	33	F	++	+	—	+	+	+	—	—	12
S17	44	F	+	++	+	+	+	++	++	—	15
S18	19	F	++	+	—	+	+	+	—	—	19
S19	49	F	+	++	++	+	+	+	++	—	22
S20	17	M	++	+	—	+	+	+	—	—	17
S21	8	F	+++	+	+	++	+	+	+	—	14
S22	10	F	+++	+	+	++	+	+	+	—	19
†S23	23	M	++	++	+	++	+	++	+	+	7
S24	53	F	+	++	+	+	+	++	+	—	26
S25	33	F	+++	++	+	++	++	++	++	—	15
S26	22	F	++	+	+	++	++	+	++	—	19
S27	40	M	+	++	++	+++	+	++	++	—	17
S28	15	F	++	+	—	++	++	+	—	—	21
*S29	58	F	++	+++	+++	+++	+	+++	++	+	39
S30	23	M	++	+	+	+	++	+	+	—	12
S31	14	M	+++	+	—	++	+	+	—	—	14

* Entropion.

† Did not attend.

- some scarring visible to the naked eye,
slight photophobia,
slight lacrimation.
- + Granular conjunctiva or microscopic follicles only,
pannus invading less than 3 mm. into the cornea,
microscopic scarring,
minor symptoms of grittiness of the lids,
slight lacrimation.

DISCUSSION

Symptomatic relief was noted in all cases which were not complicated by entropion, but was rather more marked and rapid in Series A; similarly, the reduction in the number and size of the

follicles was more dramatic with aureomycin. In neither series was there any retrogression of pannus during the course of treatment; but in Cases A7, A20, A26, S6, and S7, which I have been able to follow up for periods up to 3 months, there has been some reduction in the calibre of the vessels though not in the extent of cornea involved. In Case A1 the right eye was treated with aureomycin and the left with sulphadiazine, each six times daily. Three months after treatment the condition of the two eyes was identical, the appearance being that of inactive trachoma.

Improvement in both series appeared to be due to the relief of secondary infection and not to cure of the trachoma. It was not possible to infer that scarring was less during treatment with aureomycin than with sulphadiazine.

TABLE III
ASSESSMENT OF IMPROVEMENT IN SERIES A AND S

Therapy	Improvement		
	Marked		Late and Slight
	Follicles	Symptoms	Pannus
Aureomycin... ..	22	28	3
Sulphadiazine	15	23	2

Taking into consideration only those findings which can be regarded as definite, the results of treatment in the two groups are summarized in Table III.

SUMMARY

The results of treatment of trachoma with aureomycin and sulphadiazine are compared in a total of 62 cases.

The slightly greater efficacy of aureomycin appears to be due rather to a wider antibiotic range against secondary invaders, than to a specific effect on the trachoma virus.

I am indebted to Dr. R. L. Cheverton for permission to publish this report and to The American Cyanamid Co., for presenting supplies of aureomycin.

REFERENCES

- BOASE, A. J. (1950). *British Journal of Ophthalmology*, **34**, 627.
 DUKE-ELDER, S., AINSLIE, D., and BOASE, A. J. (1950). *Ibid.*, **34**, 30.
 MOUTINHO, H., GRILO, M., and MOURA, S. DE (1949). *Gaz. med. portug.*, **2**, 497.
 SHAH, M. A. (1951). *British Journal of Ophthalmology*, **35**, 50.