and must be considered as an adjuvant to treatment with antivenene. *On no account should soap be given intravenously as a substitute for antivenene.*

Similar experiments with viperine venoms are in progress.

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A Mirror of Hospital Practice

A CASE OF SEPTICÆMIA TREATED WITH PENICILLIN AFTER FAILURE OF SULPHONAMIDE THERAPY

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ALTHOUGH the uses, doses and methods of administration of penicillin have now been well outlined according to our present knowledge of the subject, doubts may arise in practice when perhaps it may be wise to follow one's clinical judgment and not to too strictly follow the rules. In this connection, sufficient interest attaches to the following case to justify a report being published.

Case report

A doctor had been well until the 12th August, 1944, when he felt a sharp pricking pain on the left nipple, while undressing. On examination, he noticed a small pimple in the area, but took no notice of it. The pimple gradually became bigger in size and slightly painful. On the 14th, he felt feverish and pain on movement of the left arm but went to work as usual. Two days later, there was a sharp rise of temperature with chill, headache and pains in the body, and he took to bed.

On examination.—A thin-built man. Temperature 104°F., pulse rate 80 and respiration 20 per minute; tongue coated. A furuncle was seen on the left nipple with a chain of small discrete, movable and tender glands in the left axilla. There was no other significant finding on clinical examination.

Laboratory findings.—Blood examination repeatedly showed no malaria parasites. The white cell count was 6,500 per c.mm. with 82.5 per cent polymorphonuclear cells. The blood as well as the discharge from the pimple grew no organisms. The urine showed a trace of albumin with scanty pus cells and a few red cells. Results of subsequent examinations are shown in the table below :—

Diagnosis.—Malaria having been excluded, dengue and enteric were suspected owing to bradycardia, but in view of the history and the local lesion, a clinical diagnosis of staphylococcal septicæmia was made.

Treatment and course.—On the 17th August, the patient was put on sulphathiazole by mouth with hot compresses of 1 in 1,000 acriflavin solution applied locally. He was also given palliative treatment including intravenous glucose with vitamin C, etc. After administration of 9 grammes of sulphathiazole in three days, his headache became worse, he felt sick and complained of abdominal discomfort; the drug was then discontinued. During the next two days, his condition seemed to deteriorate, and on the 22nd a suggestion was made to try penicillin, but no genuine preparation being available sulphadiazine was started instead. A total of 28 grammes of this drug were given in five days but without any effect.

In the meantime, the patient's condition was getting worse. He became restless, complaining of severe headache practically all the time. The temperature was of high remittent type with repeated rigors, but the pulse was relatively slow and respiration slightly increased. Blood pressure 110/65 mm. of mercury. The face was puffy; the tongue red and dry. He was constipated with a distended abdomen, but the urinary output was fairly good. The furuncle and axillary glands remained practically the same as before. About this time, he complained of slight pain in the scrotum which was found to be due to local dermatitis and swollen and tender testes (left).

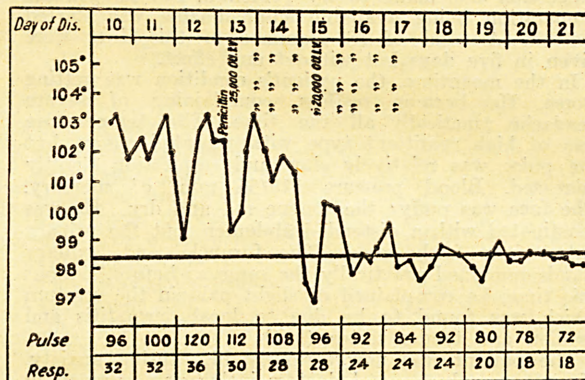
The patient was now seriously ill, causing anxiety. He was seen by several doctors including a surgeon in consultation, and our only hope seemed to rest on penicillin which had hitherto been unobtainable. After much enquiry and search we managed to secure only one ampoule (100,000 units) and this treatment was started on the 26th August, it being given intravenously twice daily, in doses of 25,000 units each. With these four doses, the temperature dropped to subnormal (*vide* chart) in the morning of the 28th, and the patient felt better. Fortunately, another ampoule could now be obtained, so that treatment was continued for a further three days (20,000 units b.d.). Convalescence started rapidly and was uneventful.

Discussion

It is very likely from a clinical standpoint that we were dealing with a case of staphy-

Date	White cell count	Blood culture	Agglutination test	Urine	Stool	Pimple smear
19th August ..	8,400 with 79% polymorphs.	Sterile	Widal negative.	..	..	Scanty pus cells.
25th " ..	6,050 with 88% polymorphs.	"	Widal and Weil-Felix negative.	Albumin trace. Few pus cells.	Negative	..
30th " ..	9,400 with 80% polymorphs.	..	Do.	..	..	..

lococcal septicæmia following a self-inflicted trauma to a furuncle on the nipple. Prior to the advent of sulphonamides, reports of cure from this disease were rare, but with their introduction isolated cases of recovery began to appear. Now with penicillin we have a powerful weapon to combat this condition. The method of treatment with this drug is rather arduous for doctors with limited facilities as in private practice and disagreeable to the patient if continued for several days. It has been recommended that for systemic infection penicillin should be used after making bacteriological diagnosis and given in adequate doses at 3 to 4 hourly intervals (or by the drip method) so as to maintain the proper blood concentration. In the present case, blood was cultured twice (while the patient was having sulpha drugs), and the results were negative. Yet it was decided to try penicillin on clinical grounds, and this seems to have been justified by the end results. Frequent administration was however not possible. Nevertheless, the improvement after four doses in two days was dramatic.



Temperature chart.

During the course of the illness, the patient's tongue became raw and there was scrotal dermatitis with tender swelling of one testes. Although the exact cause of these manifestations is not clear, it is possible that they were caused by the administration of sulphonamides in large doses thus interfering with the biosynthesis of riboflavin in the intestine, while the body requirements must have been increased owing to a heavy infection. Incidentally, one fact worth mentioning is that the patient while under sulpha treatment passed unchanged a few tablets of sulphadiazine in the stools due to failure of one of the nurses in attendance to crush them before administration. It is well to impress the importance of this simple, but apt to be neglected, routine on the attendants.

Conclusion

A doctor with acute septicæmia made a rapid and complete recovery when treated with penicillin after showing no response to sulphonamide therapy. The turning point of the illness in the critical stage was undoubtedly due to penicillin treatment, although the diagnosis was not confirmed bacteriologically and the drug was administered infrequently owing to the difficulty in obtaining a sufficient supply. As penicillin is available now in civil practice, the latter difficulty may no longer arise, but a negative bacteriological report should not outweigh a definite clinical diagnosis and indications for its use.

Acknowledgment

So many people were directly and indirectly responsible for assistance in this case that it is impossible to mention them here individually, but we take this opportunity to express our sincere thanks to all of them.

TWO CASES OF STRANGULATED HERNIA

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Case 1.—R. S., 42 years, was admitted to hospital on 5th February, 1944, with a large mass in the right scrotal region which extended up to the groin, fully occupying the inguinal canal. He came walking and was not in great distress. The abdomen was not distended, nor was there any history of retention of urine or of constipation. The only thing he complained of was discomfort and some pain due to the swelling.

The history he gave was that two years back he was operated on for hydrocele on both sides, and ever since then he had been suffering from hernia of the right side. It had been reducible, but some 15 days ago, it had descended and since then it had been in its present condition and could not be reduced. As it was causing some discomfort he went to a branch dispensary where he remained for a week, but finding no relief he came to the sadar hospital.

Under chloroform anæsthesia an incision for radical cure of hernia was made, but upon opening the sac it was found to contain some two feet of ileum and its mesentery. The ileum was blue and œdematous and the mesentery was thickened to the size of almost an impregnated broad ligament. An attempt was made to reduce the mass back to the abdominal cavity, but in doing so the ileum gave way in two places and fæcal matter poured out of it in the field of operation. This was mopped clean and the piece of gut which had ruptured was excised and an end-to-end anastomosis was made. About a foot of the ileum with mesentery had to be removed. The bleeding from the cut mesentery gave some trouble, but ultimately was controlled. After resection, the herniated mass could easily be reduced back into the abdominal cavity. The operation was then completed in the usual way. Before sending the patient from the operation room 5 c.cm. of soluble sulphonamide and ¼ grain of morphia were given by injection.