

the 10 grammes bottles which are supplied for hospital use) and dissolved. The labour of opening each ampoule is thus avoided.

I have retained a portion of my first sample and quite recently I was able to show that it had neither undergone any chemical change nor increased in toxicity although it had been kept in an ill-corked bottle for 2 years at the ordinary Calcutta room temperature.

IZAL IN CHOLERA.

By LALBEHARY GANGULY,
Teacher In-Charge of the Cholera Ward, Campbell Hospital, Calcutta.

To test the efficacy of izal in the treatment of cholera it has been given a fairly extensive trial in the Cholera Ward of the Campbell Hospital from January to May 1925. As outbreaks vary in severity, to compare the effect of izal with that of our usual treatment with calomel, we put cases on izal or calomel, alternately, as they were admitted. Although the advocates of the izal treatment consider saline transfusions unnecessary, in view of the fact that practically all our cases were totally pulseless on admission, we did not consider it safe to withhold saline transfusions in any cases. If izal had any good effect it should manifest itself in a higher recovery rate even though cases received transfusions.

Izal was given on the lines recommended (Palmer 1924). Calomel was given in fractional doses until the stools changed colour. In both groups saline transfusions were given according to specific gravity indications of the blood. Calomel cases received alkalies with saline transfusions when necessary but izal cases did not (except by the mouth in some as noted below), this apparently being considered unnecessary with izal.

From January to May, 513 genuine cases of cholera were dealt with.

The mortality amongst calomel cases was 22.5 per cent.

The mortality amongst izal cases was 23.6 per cent.

The mortality is practically the same in the two cases but it should be noted that directly any one of the cases put on izal showed signs of impending uræmia, alkalies were started by the mouth and if there was no improvement within about twelve hours, izal was stopped altogether and alkalies pushed both intravenously and by the mouth. Thus in 23 cases it was considered imperatively necessary to stop izal and give alkalies. Taking these 23 as deaths, mortality in the izal group would stand at 35 per cent. much higher than in cases treated without izal. It is recognised that cresol bodies irritate the kidneys, and their administration in cholera would naturally be conducive to the onset of uræmia. It is a matter for some surprise that uræmia was

not more frequent in the izal group than was actually the case. This is probably because absorption from the gastro-intestinal tract is minimal in cholera.

Other complications of cholera, such as bronchopneumonia (this exacted a heavy toll), asthenia, parotitis, etc., were practically the same in each group.

The number and amount of saline transfusions were also practically the same.

Change in the character of the stools was somewhat earlier in the calomel group. Vomiting was the same in both. Vibrios were recovered from the stools with equal frequency in the two groups. It was not possible to investigate as to whether izal cases became vibrio-free earlier than calomel cases.

CONCLUSIONS.

(a) In the treatment of cholera, izal cannot be put on a higher level than any other drug so far tried.

(b) It is at a distinct disadvantage compared with others that have no irritant action on the kidneys. So far as any specific action is concerned, there is not much to choose between any of the drugs in common use *provided the drug exhibited has no irritant action on the kidneys.*

(c) Success, of the standard of an 80 per cent. recovery amongst pulseless cases, lies in judicious administration of salines and alkalies.

REFERENCE.

Palmer, F. J., 1924. The Treatment of Cholera by Cresol. *Indian Medical Gazette*, Vol. LIX, pp. 381-385.

LICHEN SPINULOSUS.

By GANAPATI PANJA, M.B.,

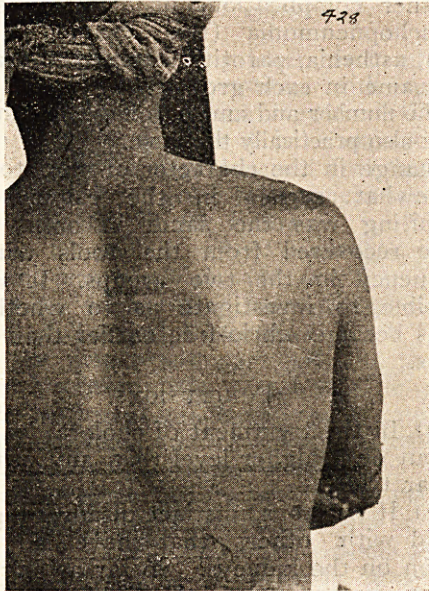
Assistant Professor of Bacteriology, Calcutta School of Tropical Medicine and Hygiene.

WE have come across four cases of this condition—one a young girl and the others male adults; two belonging to the better class and the rest to the lower class; one fair complexioned and the others dark.

The disease came on spontaneously but in the case of the first it appeared some time after typhoid. The general health of all was good. There were no septic foci in their teeth, throats, or elsewhere. There was no family history of the disease and no history of syphilis. The duration of the disease varied from three months to a year. No spontaneous cures and relapses were noticed.

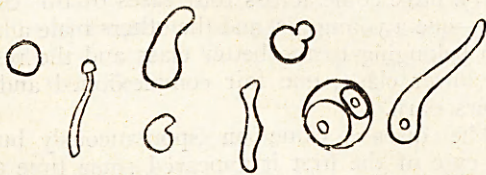
The disease is characterised by more or less symmetrically distributed groups or patches of sago-grain-like papules surmounted by filiform spines, arising from the hair follicles and situated most commonly on the abdomen and on the back of the shoulders near the axillæ. A distinctly rough feeling is experienced by passing the hand over the lesions. The appearance may

be compared to the characteristic arrangement of staphylococci under a microscope. No subjective symptoms are present.



Pathology.—A section of the lesion shows cellular hypertrophy around the hair follicles. No organisms could be detected. Most of the books on skin diseases state that the cause of the disease is at present unknown, but I have found fungi of the *tinca* group in scrapings from all the cases. The examination was made as follows:—

Horny plugs were scraped with a knife, treated with liquor potassæ (B.P.) on a slide and covered with a vaselined cover-glass. About 1 to 2 hours later the cover-glass is pressed a little so as to flatten the plugs and an examination is made with the 1|6th lens. The



Fungi seen in scrapings from
L. spinulosus.

accompanying diagram shows the appearance of the fungi. The keratin of stratum corneum swells up when treated with liquor potassæ and assumes a fungus-like appearance but this is quite different from the appearance of the true fungi.

Attempts have been made to grow this fungus, so far without success. We are waiting for further cases and if fungi are found in every case or at least in a large number of them, then,

the name *lichen spinulosus* may be omitted and replaced by *tinca spinulosus*.

The disease has to be distinguished from the following:—

- (1) *Lichen planus*.
- (2) *Keratosis pilaris*.
- (3) *Pityriasis rubra pilaris*.

Lichen planus is an irritable disease and the papules are flat, glistening and polygonal in shape.

In *keratosis pilaris* the lesions are usually present on the extensor aspects of arms and thighs and not grouped in patches.

Pityriasis rubra pilaris is an inflammatory disease and shows scaliness.

Treatment.—McLeod says that the affection is comparatively easily cured, but we hold just an opposite view. We have tried strong keratolytic remedies without rapid improvement. Vigorous scrubbing with soap, rectified spirit and hot water, and applications of tincture of iodine 4 drs., liq. hyd. perchlor. 1 dr., aqua ad. 1 oz. followed by ung. acidi salicylici 1 dr. to 1 oz. at night have been found the most successful. If iodine irritates, its application should be stopped. Painting single patches with diluted trichloroacetic acid may do good. Sometimes resorcin and benzoin lotion are useful. We have not tried the effects of x-rays on the disease.

FUNGO-SPIROCHÆTAL AFFECTIONS OF RESPIRATORY PASSAGES.

By DR. SARUP NARAYAN MATHUR, L.M. & S.,

Civil Surgeon, Unao, Oudh,

and

K. N. ZUTSHI, M.B., B.S.,

Honorary Clinical Pathologist, Civil Hospital, Unao.

WHILE examining sputum of cases for T.B. at the Unao Hospital Laboratory, we have come across forms closely resembling the *Monilia tropicalis* of Castellani, together with spirochætes, pneumococci and *Micrococcus catarrhalis*. In a few there were staphylococci, streptococci and seldom fusiform bacilli.

The first case we saw in 1923 was a female of a well-to-do family and the appearance of *Monilia* reminded us of the articles published in the *Indian Medical Gazette* for November 1922 and April 1923, and so we began to examine the sputum of all suspected cases.

Up to this time we have come across 8 such cases (5 males and 3 females), and they can be classified into the following types:—

(1) Chronic cough with involvement of tonsils, sometimes with fever for two or three days and sometimes bloody sputum. Such cases were otherwise apparently healthy.

(2) Acute febrile bronchitis with bloody sputum supervening on sub-acute throat trouble. Acute condition disappearing rapidly after the use of the pot. iodide and