

of sarcoma following injury in these cases. See also the answer to a question on calcium metabolism in Paget's disease in our issue of Jan. 24 (p. 183).

Keeping Qualities of Glucose-saline

Q.—What are the keeping properties of 5% and 20% glucose in normal saline? This is made up with pyrogen-free water and is kept in a sealed bottle of alkali-free glass after the usual non-caramelizing sterilization.

A.—A solution containing these ingredients made up as described should keep, one might almost say, indefinitely, provided the sterilization has been carried out in the final containers, previously sealed; the closure must be perfect at the end of the process and remain so during storage. There is a requirement in the first Addendum to the *British Pharmacopoeia*, 1932, for sterilized water and physiological solution of sodium chloride, that if the closure is made with non-absorbent cotton-wool wrapped in gauze the contents are to be used within one month after preparation, but if kept in a container which is sealed by fusion of the glass or by some equally effective method they may be stored for "a longer period." The same remarks could equally well be applied to solutions of glucose in normal saline.

Comparison of Mortality Rates

Q.—What are the mortality rates of the following diseases in the United Kingdom for 1925-7 and 1945-7: puerperal sepsis, heart disease, pneumonia, tuberculosis, cancer, Bright's disease, diabetes, and pernicious anaemia?

A.—A comparison of the number of deaths from puerperal sepsis over the last twenty years cannot be made because the individual causes included under this heading were revised in 1940; it is not possible to reconstruct the group from the subgroups. Bright's disease was not tabulated separately but was included under the heading of nephritis.

In 1940 a change was made in the method of tabulating causes of death. Previously a rule of preference had been established when two or more causes of death were mentioned on the death certificate, but from 1940 the physician's preference was used. This made a considerable difference to the number of deaths assigned to some causes. Factors have been found that will make a correction for this change of classification, and these must be used to get any comparison. The following rates may be of use.

Crude Death Rates per 1,000,000 in England and Wales

	1925	1926	1927	1945	Ratio for Conversion
Heart disease	1,647	1,650	1,835	3,354	0.994
Pneumonia	951	828	948	521	1.040
Tuberculosis, all forms ..	1,039	961	972	615	0.974
Tuberculosis, respiratory ..	833	771	791	515	0.969
Cancer	1,398	1,430	1,443	1,990	0.971
Nephritis	324	326	353	327	1.128
Diabetes	112	115	126	106	0.689
Pernicious anaemia ..	66	71	68	55	0.757

The ratio for conversion is the value by which the pre-1940 rates must be multiplied to make them comparable with the modern rates.

Male Infertility

Q.—(a) Where a fresh specimen of semen contains apparently normal numbers of spermatozoa, but completely non-motile, can any useful treatment be given?

(b) What is the prognosis and treatment (if any) in a case of male infertility in which examination of semen (condom-collected) gave the following results? February, 1947: 24 million spermatozoa per ml.; % motility nil; abnormal forms 21%. November, 1947: 12.5 million spermatozoa per ml.; % motility nil; abnormal forms 40%. The general health is good, and there is no genital abnormality. Is one justified in giving the patient hope, or should he be told that treatment is valueless?

A.—(a) It is first necessary to know how the specimen of semen was collected. Many cases of non-motility of the sperms are explained by the fact that the semen was collected in a rubber sheath—and sheaths, unless repeatedly washed, are

likely to contain traces of chemicals used in their manufacture. Necrozoospermia is very rare and is almost always associated with other defects in the semen, reduction in numbers, high percentage of abnormal forms, etc. It would be advisable to have another specimen examined and to arrange for a more complete analysis.

(b) Prognosis and treatment are always difficult when one is ignorant of the aetiology of a disease, and as yet we have very little knowledge of the factors responsible for subfecundity. The absence of any motility in the sperms may be partly explained by the use of a condom for the collection of the specimen. It is likely, however, that motility and viability were both reduced. In this case, therefore, we are dealing with oligozoospermia, reduced motility and viability, and an increased incidence of abnormal forms, especially in the second specimen. Should the patient's wife conceive she would probably have a miscarriage. It would be a mistake to tell the patient that there is no hope, for fertility fluctuates in such cases and spontaneous improvement frequently occurs. A search should be made for a focus of infection anywhere in the body, and if found this should be treated. He might also be given very large doses of vitamin E and a course of some anterior-pituitary-like hormone. A more accurate prognosis could be given if a testicular biopsy were carried out.

NOTES AND COMMENTS

Tecira Tummy.—Dr. G. BROADBENT LIBBEY (Newcastle-upon-Tyne) writes: Can anybody who was stationed in the Azores during the war give any information on "Tecira tummy"—its clinical course, diagnosis, bacteriological findings, and treatment? A young airman suffered from this in 1944; from his history the condition was not adequately investigated and treated. A few weeks ago he presented himself with a history of continued diarrhoea with loss of weight and energy; the only significant finding clinically being the typical rope-like, slightly tender, pelvic colon of chronic dysentery. Stools on culture have grown *B. dysenteriae* Sonne which persists after 40 g. of sulphaguanidine. It would appear that the two are related.

Legal Ownership of X-ray Films.—Dr. HELEN W. RUST (Southport) writes: I was interested in your views on the legal ownership of x-ray films ("Any Questions?" May 29, p. 1059). When I was x-rayed in Prof. Schaul's department before departing as a *famula* into one of Berlin's greatest tuberculosis sanatoria, I was given the film without asking for it. When films are kept by the radiologist, who can stop him from destroying them under the label "lost" or "cannot be found," etc., whenever he is accused of negligence? As long as the films can be produced when required the radiologist will always be able to defend himself, no matter who owns them. Whenever the patient has difficulty in getting his films, there is always a reason for it.

Corrections

The date of the death of Dr. Peter Frankel was by error given as April 16 (*Journal*, June 5, p. 1113). This should have been April 10.

In the legends to the photomicrographs illustrating the paper by Dr. G. Harvey Smith (June 5, p. 1078) the magnifications of the two sections shown were omitted. Fig. 1 was $\times 260$ and Fig. 2 $\times 320$.

Dr. J. COUTTS MILNE (Singapore) writes: Possibly some zealous statistician has already drawn your attention to what appears to me to be an error in the annotation headed "Poliomyelitis" in the *Journal* of March 27 (p. 608) in which Bradley and Gale's survey of poliomyelitis in England is reviewed. The attack rate should, I think, read 18 per 100,000 in place of 3.8 per 100,000. The latter rate is that for 1938, the year of previously highest recorded incidence.

[The figure given by Dr. Coutts Milne is correct, and we are obliged to him for pointing out the error.—Ed., B.M.J.]

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