1½ to 2 feet. As a nasal, pharyngeal, or vaginal douche a bland mineral water may act as a valuable solvent of mucus, a cleansing agent, or as a vehicle for other medicaments.

So much for the use of hydrotherapeutic methods. The indications must be not for this or that disease. Let us get away from Galen and his classification of diseases and back to Hippocrates and the estimate of the total personality, bodily and mental, of our patients. When the doctor has arrived at a diagnosis, not that the patient is suffering from this or that disease, but that he requires a change of scene and occupation, elimination of poisons, or a redistribution of circulation, let him remember the possibilities of a spa and hydrotherapy. On the other hand, let him not expect results from hydrotherapy where these effects are not likely to help, for in this lies abuse of hydrotherapy. Obviously acute disease of any sort is not suited to such treatment, at least until the active stage of the disease has abated, and, above all, the submission of a case of acute rheumatism to hydrotherapy within three and probably six months of the attack is to be avoided. Where there is any cardiac affection which has not completely subsided I am prepared to say that these cases always do badly, and even cases which do not show any evidence of cardiac disease on their arrival at a spa may do so in the course of their treatment if sufficient time has not been allowed to elapse since the acute attack.

Finally, let us face the facts of hydrotherapy and realize what we can do with its aid, and confine ourselves within these limits. The worst abuse of hydrotherapy is the tendency to make a mystery of it, and to regard it in any way as a miraculous cure for any and every disease.

OVARIAN SARCOMA IN A CHILD ASSOCIATED WITH SEXUAL PRECOCITY.

BY

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CERTAIN tumours of childhood are associated with striking general abnormalities. This is specially true of tumours of the gonads, adrenals, and pineal body, which may be associated with precocious sexual maturity. The number of recorded cases where the abnormality has been found in association with a tumour of the ovary is comparatively small. In these cases menstruation is established at such an early age as to be truly precocious, and there is also found enlargement of the mammae and the growth of pubic hair.

The explanation of the relation of the tumour to the general condition produced has led to considerable speculation. It is well established that the gonads have a direct influence on sexual development, and it is possible that the tumour may lead to an increased formation of the tissue which influences development—the changes produced are simply the expression of a true precocious puberty. Klemperer, who accepts the view that the interstitial cells of the gonads are essential for the normal development of the sexual characteristics, believes that those tumours associated with sexual precocity are sarcomas derived from the interstitial cells. If this opinion can be accepted, then hyperactivity of the tumour tissue might be adduced as the cause of the developmental anomalies noted.

The origin of ovarian tumours is somewhat obscure. They are generally met with during the period of sexual maturity, but are also occasionally seen in children. The incidence of malignant tumours of the ovary in children increases markedly during the second decade—that is, at and after puberty. Cases occurring in children under 10 years of age are remarkably rare.

The case recorded in this paper occurred in a child in her third year of life, and a malignant tumour of the right ovary was associated with sexual precocity. The tumour was subsequently removed and the patient remains well, with no apparent sign of recurrence two and a half years after operation.

The following is the history of the case.

The patient was stated to have been a perfectly healthy child since birth, presenting no abnormal symptoms whatever. When 2 years and 10 months old she had some vaginal haemorrhage lasting three days, and shortly after this a swelling was noticed in the abdomen.

When brought to hospital there was a well-marked abdominal tumour about the size of a cricket ball, firm, rounded, and freely mobile, rather to the right of the mid-line and below the umbilicus. The child was normal in weight and height, but it was noticed that there was distinct enlargement of both breasts, conforming to the adult female type, and in addition there was a marked development of the pubic hair.

Whilst under observation in the Children's Hospital she had a second vaginal haemorrhage, which occurred twenty-eight days after the previous period. In view of these symptoms a provisional diagnosis of an ovarian tumour was made; a radiogram proved negative, and cystoscopic examination showed that both kidneys were acting normally.

On August 26th, 1925, the abdomen was opened by a right paramedian rectus incision and a freely mobile tumour was found arising from the right ovary. It was free from adhesions, and there were no peritoneal or glandular metastases. The uterus appeared large for the child's age; the left tube and ovary were normal. The tumour and right Fallopian tube were removed intact and the wound closed. The child made a straightforward recovery from the operation.

The specimen was examined by Dr. A. E. Somerford.

Pathological Report.

The tumour, which weighed 225 grams, was about the size of a cricket ball, and was rounded in form. There was no distinct capsule. It was practically a solid tumour, but on section there were some cystic areas of small size filled with altered blood. Microscopically the growth had the structure of a small rounded sarcoma in which there were numerous areas of haemorrhage. There were no remnants of ovarian tissue present.

Subsequent History.

Since the operation the child has developed normally. The breasts have decreased in size, there has been no further menstruation, and the pubic hair has been lost. A recent examination two and a half years after operation has revealed no evidence of recurrence of the tumour, and no metastases could be discovered.

Remarks.

The points of special interest in the case are the rarity of the condition and the early age at which the tumour was discovered, most other cases recorded occurring in older children.

The nature of the tumour was established pathologically as being a sarcoma, and it is interesting to note that the ovary itself could not be recognized either by the naked eye or by the microscope, being completely incorporated in the tumour.

After removal of the growth the condition of the child has returned to normal, and although the tumour was histologically malignant the subsequent history of the case has been satisfactory.

THE CAUSE AND TREATMENT OF THE CRISIS IN LOBAR PNEUMONIA.*

BY

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IN South China and Hong-Kong quite 90 per cent. of the cases of lobar pneumonia are caused by the pneumococcus of Fraenkel. The crisis is not due to immunization, for if this were the cause the fall in temperature would be gradual as the immunity increased, and hence the curve would drop very slowly over a number of days. The drop in temperature is, however, sudden, often occurring within a few hours, and hence the cause cannot be explained in this way.

The pneumococcus grows very readily on blood agar, producing a characteristic green coloration; no other known organism can produce this particular green coloration on blood agar. Moreover, it is known that after a time the pneumococcus ceases to grow in the same medium, and it has been shown experimentally that this is due to the formation of hydrogen peroxide or some other peroxide, and that no other agent can produce the same identical colour.

Numerous experiments show that the pneumococcus

* Modified by the author from a lecture delivered to the Hong-Kong Branch of the British Medical Association.