

among which they have arisen, and in the secondary growths, when present, somatic mitoses occur in the growing margin, which, it will subsequently be shown, is also a feature in the growth of cancer when transferred to a new host.

The transmissibility of cancer from man to animals, or from one animal to another of a different species, has never been successfully performed. Successful transplantation experiments have been made, however, from animals suffering from malignant new-growths to others of the same species. Careful microscopic examination has clearly demonstrated that the new tumors which develop arise from the actual cells introduced. Transplantation is, in fact, identical with the process of metastasis, as it occurs in the individual providing the tumor. It is remarkable, however, that the tumor used in these experiments does not produce metastases naturally, and its malignancy is only evidenced by its progressive growth and the undifferentiated character of the cells. The process is in no sense an infection, the tissues of the new host not participating in the formation of the new parenchyma. The origin of the stroma has not been accurately determined. The experimental transmission of carcinoma shows that we must distinguish between the problem of the genesis of a malignant new-growth and that of the conditions which permit of its continued existence.

The wide zoological distribution of malignant new-growths—their limits are not yet determined—indicates that the cause of cancer is to be sought in a disturbance of those phenomena of reproduction and cell life which are common to the forms in which it occurs. Our observations on animals show that malignant new-growths are always local in origin and of themselves produce no evident constitutional disturbances whatsoever. These facts are in full accord with accumulated clinical experience in man. In connection with diagnosis and statistics one must emphasize the importance of the absence of specific symptoms. The evidence we have advanced that cancer is an irregular and localized manifestation of a process otherwise natural to the life cycle of all organisms probably explains why it is that malignant new-growths, and their extensive secondary deposits *qua* cancer, are devoid of a specific symptomatology.

Remarks on Extensive Carcinoma of the Oesophagus, with Unusual Nervous Complications.—SAUNDBY and HEWETSON (*British Medical Journal*, March 12, 1904), after reporting in detail this case, state that it is of special interest because it appears to constitute an exception to "Simon's Law": The occurrence of an isolated paralysis of the abductor filaments of the recurrent laryngeal nerve in cases in which the roots or trunks of the spinal accessory, pneumogastric, and recurrent nerves are injured or diseased is not an isolated pathological curiosity. There is a distinct proclivity of the abductor fibres to become affected in such cases, either at an earlier period than the adductor fibres or even exclusively." In this case, both physiologically and pathologically, the adductor disablement was earlier and more intense in degree than the abductor. The clinical evidence showed that this adductor paralysis was an early and constant feature of the laryngeal condition during the whole of the patient's life in hospital. The abductor muscles, on the other hand, appeared to act well until a few days before death, when a slight narrowing of the previously wide-open glottis was noticed.

The most reasonable explanation of this is that the nerve fibres going to the adductors of the vocal cords were disabled earlier and in much larger proportion than the nerve fibres going to the abductor muscles. This explanation, of course, takes for granted that the nerve fibres of the trunk of the recurrent laryngeal nerve are differentiated into special fibres for special muscles, though not necessarily arranged in any special position within the epineurium of the nerve.

Reflex Disturbances Associated with Adherent Prepuce.—SIMON (*British Medical Journal*, March 12, 1904) notes briefly three interesting cases in which marked symptoms were produced by an adherent prepuce, or narrowed urethral meatus. The first case was a boy, aged eighteen months, who suddenly became unable to walk. Any attempt to make him walk caused very severe pain. Careful examination failed to show any coxalgia, but the prepuce was found to be long and adherent. The child was circumcised, and recovery was immediate and complete. The second case, a boy aged fourteen years, had obstinate and severe intestinal colic, which was not relieved by medical treatment. An adherent prepuce being discovered, this was treated, and all the symptoms disappeared. In the last case, a boy aged three years, there was a history of his wakening at night, screaming and complaining of pain in the abdomen. No other cause being discovered, the penis was examined, and the prepuce found adherent and the meatus narrow. Under appropriate surgical treatment the symptoms disappeared.

Experimental Nephritis Followed by Decapsulation of the Kidney.—HALL and HERXHEIMER (*British Medical Journal*, April 9, 1904) state that when Edebohls first suggested the decapsulation of the kidney as a reasonable method of treatment in chronic nephritis he based his proposal upon the urinary and general improvements which followed the fixation of a movable kidney by the removal of its capsule. In one of his cases which died four months after decapsulation, he observed "enormously dilated and enlarged bloodvessels which penetrated from the fatty capsule through the capsule proper into the kidney substance." This access of additional blood he considered would provide increased nutrition, stimulate an extensive regeneration of the secreting cells, and consequently produce a more efficient excretion of waste products. Whether decapsulation yields better results than the simpler renal puncture of Reginald Harrison, which has been so widely and successfully employed, is a question which the available clinical data have not yet satisfactorily answered. We must wait from two to five years before making any definite conclusions as to the value of this operation. Meanwhile, we may with advantage investigate the anatomical aspect of the procedure, and thus the present inquiry has for its main object the observation of the tissue changes which follow the decapsulation of kidneys in which nephritis has been induced.

While we must clearly admit that artificial animal nephritis cannot be too closely compared with nephritis in a human subject, yet we submit that the changes produced by metallic poisons are somewhat similar in each case, and the experiments provide at least some grounds for the probable occurrence of like processes in the human kidney.

We must, of course, for the moment only deal with the forms of degen-