

vidual cells that the experience and judgment of the pathologist are taxed to the utmost. Many difficulties arise which lead in some cases to his giving a report which is indefinite, non-committal and unsatisfactory, from the surgeon's standpoint. First among these is the, as yet, undiscovered etiological factor which causes malignant tumors. Again, the pathologist has to keep in mind the numerous pathological changes that obscure or resemble early malignancy in tumors. For example, inflammation, with the formation of granulation and fibrous tissue, so obscures the picture of malignancy that many pathologists nowadays are of the opinion that it is quite impossible in its presence to come to a definite decision as to whether malignancy is present or not. The infective diseases, syphilis and tuberculosis, produce pathological changes, certain areas of which closely resemble some types of malignancy. Benign tumors, with degeneration or inflammation superimposed, may closely simulate malignant ones. Mixed tumors, arising in the brain, kidney, testicle, prostate and thyroid, continue to baffle pathologists as to their exact nature. Endotheliomata are also not clearly understood.

Assistance might be given to the pathologist to remove some of the above difficulties by bringing him in closer association with the clinician, thus enabling him to see the whole clinical picture of the case as well as the microscopical nature of the tumor.

Every endeavor should also be made to reduce the artefacts in a specimen to a minimum. The sooner a section is examined after its removal the truer and more accurate the picture of its structure. Therefore, in forwarding material for pathological examination decomposition must be avoided by placing the material in ice or in some preserving fluid, formalin 5 to 10 per cent. being by far the most satisfactory one. Too strong solutions should not be used, as they produce contraction of the tissues and distortion of the cells. A full clinical history of the case should invariably accompany the specimen, stating the exact site from which it was removed and its relation to the surrounding tissues.

*Conclusions:—*

- (1) That a closer association should exist between the pathological and clinical branches of the profession.
- (2) That sections of tumors should be examined microscopically during the operation for their removal.
- (3) That the pathological report of a specimen is sometimes unavoidably unsatisfactory.
- (4) That specimens must be properly preserved during transportation and be accompanied by a full clinical history.