

This body, originally described by one of us in 1895 as the archoplasmic vesicle, is a very conspicuous and apparently constant feature peculiar to the spermatogenic cells of, at any rate, the vertebrata and it has since been encountered beyond that group by other observers. When fully developed it often assumes a size approximating to that of the nucleus. Indeed, the latter is often deformed and made to assume a crescentic or cuplike shape owing to the enlargement of the adjacent archoplasmic vesicle. The vesicle and its contents ultimately form the so-called "cephalic cap" of the spermatozoon.

The remarkable similarity between the structure just described and those known as Plimmer's bodies will have become obvious. It is not, perhaps, accidental that just as in the case of nuclear divisions, so also in the cellular inclusions, a parallelism between the cells of reproductive tissues and of cancer cells should be found to exist. But we do not on this account regard the cells of cancer as *identical* with those of the sexual cells, as we were careful to point out in our first communication in 1903. But the resemblances between what we have termed gametoid and the true gametogenic cells now seem to be even more significant than they appeared to be at that time. Both classes of cells are autonomous to a very high degree and both possess the faculty of continuous or intermittent multiplication independently of the tissue requirements of the organism. And finally both exhibit cellular and nuclear metamorphoses which not only, *mutatis mutandis*, resemble one another, but differ materially from those pertaining to the normal somatic cells.

It is possible that the malignant elements are the outcome of a phylogenetic reversion, as was suggested by Sir William Collins, but the matter is obscured by the disturbing influences that have been operative during the actual ontogeny of the cells and tissues from which these elements have sprung. If this be so the connexion apparent between gametoid and the true reproductive cells will acquire a still deeper significance. But we propose to reserve the discussion of this question for another occasion.

In thanking those who have helped us with material we would mention especially Mr. Plimmer himself who has most kindly placed preparations at our disposal. We would further record our indebtedness to the Imperial Cancer Research Fund for a grant in aid of our investigation.

ACUTE AORTITIS.

BY WALTER BROADBENT, M.A., M.D. CANTAB.,
M.R.C.P. LOND.,

ASSISTANT PHYSICIAN TO THE SUSSEX COUNTY HOSPITAL.

ACUTE aortitis is so rarely seen that the following case seems worthy of record.

A man, aged 45 years, came to my out-patient department at the Sussex County Hospital on March 1st complaining of pain across the left chest after partaking of food. He said that for three months he had had some discomfort in the upper abdomen an hour or more after meals and for about ten days there had been definite pain in the lower part of the left chest, mainly late in the afternoon, which he attributed to indigestion. He did not look ill. His tongue was slightly furred and his bowels were regular. His pulse was 80, the artery was a little above the normal size, the walls were not much thickened, and the wave was very easily compressible, not collapsing. The apex beat was in the vertical nipple line two inches below the nipple; the impulse was poor. On auscultation a moderate first sound, a second sound, and a short diastolic murmur were heard. At the pulmonic and aortic cartilages there were soft second sounds and a short diastolic murmur. In the neck the second sound was distinct. There had been no rheumatic fever. No history of syphilis was obtained. There was no tenderness in the epigastrium and the stomach was not dilated at all. The pain never spread to the arm and the man thought that food had more to do with it than exertion, but as the physical condition of the stomach seemed good and that of the heart doubtful a mixture containing spirit of nitrous ether and strychnine was ordered.

A week later the patient came again saying that the pain had become steadily worse and for four days it had been

shooting all over his chest and down his left arm. It was now exceedingly severe and the attacks were almost continuous. He looked pale, anxious, and worn, though a week before his appearance had been healthy. His pulse was 96 and was very easily compressible. The apex beat was barely perceptible and the first sound was weaker than before. He was sent to the hospital for admission and an hour later, just after getting into bed, he died suddenly.

At the post-mortem examination the most striking feature was the bright red colour of the first three inches of the aorta inside and outside. The aortic valves were found to be practically competent by the water test. They were thickened and showed signs of atheroma. The mouths of the coronary arteries were almost completely occluded and only a bristle could be passed through either. A calcified plaque formed part of the obstruction to the right but the other was blocked by swollen intima. Areas of old atheroma were scattered on the aortic walls, and, in between, the intima was bright pink and swollen in patches, the appearance corresponding closely to the water-colour drawing in Sir William Broadbent's work on "Heart Disease" (third edition). Outside the adventitia was red and injected. This extended up to about the origin of the innominate artery. There was no spread of inflammation into the left ventricle. The heart muscle seemed firm.

Dr. F. G. Bushnell kindly cut sections of the aorta and heart muscle. In those of the aorta there was a perivascular infiltration with leucocytes round the vasa vasorum of the aortic wall, more marked in the outer coat. The sections of the heart muscle stained in Sudan III. and osmic showed a singular absence of change. The striation of the muscle and the nuclei appeared normal and no fatty or fibroid degeneration was found; all that could be seen was a slight pigmentary deposit near the nuclei. No bacteriological investigation was made.

As in previously recorded cases this was an acute inflammation attacking an aorta already damaged by atheroma. The primary cause of death in this case must have been the blocking of the orifices of the coronary arteries by the swelling of the intima, since one cannot imagine the heart continuing to beat for long when only a bristle could be inserted into either coronary artery, and the condition of the heart, free from fatty degeneration or fibrosis and with the muscle in apparently good condition, shows that the obstruction to the blood-supply was not of long duration. The clinical history of the case also bears this out, there being no true attack of angina pectoris until four days before death and then there was a rapid increase in the number of the attacks.

The duration of the disease from the first symptom which could be called cardiac pain was only 17 days, the usual length being from two to six months, but Dr. F. J. Poynton relates a case of sudden death¹ due to acute aortitis with no history of previous illness. He gives details of two cases but in neither was there any inflammatory obstruction of the coronary arteries; in one there was fatty and in the other fibroid degeneration of the heart wall, and in both he describes the nuclei of the muscle fibres as staining indistinctly and the striation as feeble, and he attributes the fatal termination to these changes. In the case described above there were none of these degenerations of the cardiac muscle.

Brighton.

¹ THE LANCET, May 20th, 1899, p. 1352.

MEDICAL GOLFERS' ASSOCIATION v. BAR GOLFING SOCIETY.—The annual match between teams representing the Medical Golfers' Association and the Bar Golfing Society took place at Woking on Saturday, May 20th. A year ago the match was played at Burnham Beeches and after an exciting finish the barristers gained a victory by one point. For Saturday's match strong teams were chosen and fair golf was witnessed, the Bar being easily victorious. The following took part in the match. Medical Golfers' Association: Dr. A. W. Daniel, Dr. W. J. Howarth, Mr. H. Dane, Dr. Percy Kidd, Dr. C. Webb, Dr. F. F. Caiger, Dr. H. P. Hawkins, and Dr. H. Low. Bar Golfing Society: Mr. H. W. Beveridge, Mr. J. Crabb Watt, Mr. L. Mossop, Mr. C. F. Parton, Mr. H. T. Wright, Mr. F. S. Jackson, Mr. R. H. Balloch, and Mr. M. Shearman, K.C. In the singles the Bar scored seven points to one scored by the Medical Profession, while in the foursomes the Bar won by three points.