In secondary deposits epithelial cells are carried off by the lymph stream to the liver or elsewhere, as also is the parasite, there to start the unequal fight once more, for maybe the epithelial cell is a comparative novice at warfare.

The shrinking of a scirrhus is analogous to the contraction of ordinary granulation tissue. Likewise it may be conceived that the parasite of sarcoma is resisted by the connective tissue cells of the mesoblast, which attain a great size when successful. After all, why should we look to the leucocytes to fight every kind of marauder unaided?—I am, etc.,

Reading, June 6th. CECIL E. REYNOLDS.

OPERATIONS ON THE PROSTATE.

SIR,—Dr. Howat's somewhat trenchant criticisms of my procedure in the case of enlarged prostate, reported in the JOURNAL of May 22nd, demand a reply, not only to satisfy him but also all others who hold similar and, in my opinion, erroneous views as to the value of suprapubic cystotomy in cases of enlarged prostate.

After all, the mortality of suprapubic prostatectomy is not high when one considers the age of the patients and the condition of the bladder and kidneys often present. Mr. Freyer's results, showing a mortality of about 7 per cent. in a large series of cases of all sorts, speak for themselves, and at the meeting of the British Medical Association at which my case was described I reported a small series of 23 cases with one death. The ages of my patients varied from 53 to 79 years. One old man, aged 79, who was operated on for severe haemorrhage, had a double aortic murmur, and is still alive and comfortable one year after. Another weighed 20 st., and had a weak heart, but made an excellent recovery. Other surgeons have had similar results.

Dr. Howat asks whether, when the bladder was opened, examination gave any indication of the degree of difficulty likely to be encountered. In reply to this I may say that on opening the bladder a large firm, elastic, lobulated mass, somewhat cone-shaped, presented almost immediately under the suprapubic wound. The internal opening of the urethra was situated at the apex of the projecting mass, a long finger-length from the neck of the bladder. Surrounding the growth was a deep trench, into the depths of which my finger could not quite reach. Consequently I did not feel the stone, which was not discovered until the prostate had been removed. The only difficulty I apprehended was the mechanical one of being unable to reach the limits of the growth with my finger. I have already reported how I met that difficulty. Dr. Howat agrees that operation was rightly considered, but argues that the operation chosen was the wrong one. He would have performed suprapubic cystotomy, with the object of relieving retention and checking the bleeding. Just so, but the retention having been relieved and the bleeding arrested, what was he prepared to do next? Wait for the suprapubic wound to close? In what other way was he going "to restore its former degree of *efficiency* (the italics are mine) to the bladder?" He must know that closure of a suprapubic wound is only likely to take place when there is free vent for the urine by the natural passage. Even a very moderate degree of obstruction is sufficient to prevent closure of a suprapubic sinus or to cause it to reopen when apparently soundly healed. In cases of enlarged prostate with obstruction closure of the sinus is certain to fail. Consequently the patient is doomed to that most distressing condition—a permanent fistula. Further, drainage of the bladder by the suprapubic route is very imperfect, and is only undertaken in septic cases prior to the performance of prostatectomy for the purpose of facility in washing out. In the case in question it will be seen that it would have been futile to have expected closure of the wound. The patient, who is a well-read man of a high degree of intelligence, had the alternatives, with all the attendant risks of prostatectomy fully explained to him, and he unhesitatingly accepted the radical operation, which, he was informed, would, if he survived, place him in a comfortable position as regards his urinary organs for the rest of his life. My medical colleagues were of opinion that though there was considerable risk with the operation, the patient had a reasonable chance of recovery, and they were further of opinion that delay would not tend to improve the condition of his heart and might be dangerous from the advent of sepsis in his bladder. If any operation were to be performed it would have to be done at once and completed once for all, as the probability was that further operative interference later on would prove too much for him. The patient had a fight for life, but has succeeded beyond my most sanguine expectations, and is now, five weeks after operation, able to be up every day. His wound is dry and he can already retain his urine for five hours, and pass it with ease and freedom.

I would recommend Dr. Howat to reconsider carefully the advisability of performing suprapubic cystotomy in similar cases, unless he is prepared to contemplate the certainty of the persistence of a suprapubic fistula, through which all or most of the patient's urine will be voided, a condition which can only be successfully dealt with by a subsequent prostatectomy.—I am, etc,

Belfast, June 7th. ANDREW FULLERTON.

SIR,—Dr. R. K. Howat's able and unbiassed criticism from a clinical standpoint (p. 1392) on the acquisition of a record prostatic trophy by Mr. Andrew Fullerton is one that will have the endorsement of clinicians. Dr. Howat, perhaps intentionally, omits to question why, in the presence of gravel and haematuria, a radiograph was not taken in this case as a preliminary diagnostic measure.

My excuse, however, for troubling you is to confirm the views expressed on p. 1301 of the previous issue of the JOURNAL by Dr. Alfred Codd, of Wolverhampton, on the treatment of enlarged prostates directly by the *x* rays. If Dr. Howat's line of treatment had been followed, after removal of the calculus, this prostate could have been thus resolved, in so far as its neoplastic tissues were concerned, and the urinary function restored.

Your comments on the function of the prostate on p. 1382, drawing attention to Professor C. Posner's contribution on this subject, are interesting in this reference. May I be permitted to suggest that, as in circumcision, the rule has been for eunuchs to be castrated in infancy or early life, and it is natural for the development of the prostate to be thus arrested in the absence of the testicular hormones? A similar influence being known to follow ovariotomy in young mammals in their mammary development, a fact, indeed, which was also responsible for the application of ovariotomy in the last decade as a remedial measure for mammary cancer, but now of merely historic importance.

The failure of castration as practised in the last decade of the nineteenth century for reducing the enlarged prostate in the aged might be accounted for if it is realized that in the vast majority of such cases the enlargement is not intrinsic and parenchymal, but is interstitial and fibrotic, the sequela of long-standing chronic prostatitis. The senescence of the emunctories, atony of the intestines, with constipation and pre-existing urethral and cystic infection, are doubtless important etiological factors to be borne in mind. Castration in the aged could not, therefore, be expected to do more than remove certain sexual reflexes, thus preventing periodic congestion in the gland.

From the small but gratifying experience radiotherapy has afforded in quickly reducing both enlarged tonsils and enlarged prostates, by means of the filtered *x* rays, on the basis of the impact of the negatively charged molecules of matter, travelling at high velocity through the large proteid molecules, which constitute the cytoplasm of all transitional cells, splitting them up and thus rendering the smaller molecules and débris more diffusible and capable of excretion without damage to the somatic cell elements, their more extended adoption in cases uncomplicated by calculus is to be recommended.—I am, etc,

London, W., June 5th. H. D. MCCULLOCH.

SECONDARY PAROTITIS.

SIR,—I have read with interest in the BRITISH MEDICAL JOURNAL of May 29th the paper by Dr. H. D. Rolleston and Mr. M. W. B. Oliver, and also the note on the same subject by Dr. W. Soltau Fenwick. In simple terms the former show that abstention from food is a leading factor in the production of secondary parotitis, while the latter recommends chewing as a prophylactic measure. The