BUCHANAN, and F. C. GILLESPIE (Glasgow): In an effort to obtain an objective index of articular inflammation, radioscans were performed on a variety of joints in 24 patients with rheumatoid arthritis of varying severity, 25 minutes after the intravenous administration of 1 m.Ci radiotechnetium (99m.Tc.). Localization of the isotope in the joint was easily demonstrated using a Picker Magna-Scanner V. It was thus possible to quantitate the display of the isotope in a joint. The method was sufficiently reproducible for clinical use, and the uptake had been found to be a function of the clinical severity of joint inflammation.

Further studies had shown that the isotope was not actively concentrated by the diseased synovial membrane, and this finding suggested that the display of isotope in an inflamed joint might reflect enhanced vascularity of the synovial membrane and other joint tissues.

Discussion.—DR. J. T. SCOTT (*London*) asked if the maximal uptake of radio technetium correlated with the temperature of the skin over the joint.

DR. DICK said that he did not yet have the equipment to make such measurements.

DR. J. H. GLYN (London) asked if it were safe to repeat the measurements more than once in the same patient.

DR. DICK felt that if the individual dose could be reduced to the region of 100 microcuries, it should be possible to repeat the tests, say, three times a year.

PROF. J. H. KELLGREN (Manchester) asked if the method described provided any more information than ordinary clinical observation.

Dr. Dick considered that the amount of uptake of isotope was a measure of blood flow and provided an objective measurement and could be used as a rapid method of assessing the effect of drugs.

Dr. Lavender suggested that the uptake of isotope was not solely related to blood flow.

MR. A. KATES (*London*) pointed out that the results presented differed from those obtained using radioactive gold injected intra-articularly.

DR. DICK suggested that the difference might be due to the differing uptakes of the two isotopes by synovial cells.

Chronic Polyarthritis in Nigerians. By B. M. GREEN-wood (*Taplow*): To be published with the discussion thereon in a future issue of the *Annals*.

Demonstration. PROF. E. G. L. BYWATERS (Hammer-smith and Taplow) presented a demonstration on "The Early Lesions of Ankylosing Spondylitis". While almost all published autopsy cases were in the ossified stage, four out of 23 autopsies at Hammersmith and Taplow showed earlier lesions. These included inflammatory erosions of cartilage at the disc margin, Romanus lesions, and discitis proper, the lesions resembling those of polychondritis rather than those of rheumatoids arthritis.

CORRECTION

In the March, 1969, issue of the Annals, p. 197, col. 2, ll. 3 and 4, for millimetres read millilitres.