REFERENCES to sarcoidosis in Ireland appear to be rare, and although no specific search was made, only three have been located.\textsuperscript{3} \textsuperscript{4} \textsuperscript{13}

Rural populations provide the vast majority of cases reported in the literature. Cummings\textsuperscript{8} reported on 160 histologically proven cases and found that many were from areas where pine forests abound. Dunner\textsuperscript{9} analysed 1,194 cases admitted to the Veterans’ Administration hospitals between the years 1945 and 1949 and found that the vast majority were from rural areas. In contradistinction, Hoyle,\textsuperscript{3} in a group of 66 found that 90 per cent. were town dwellers.

Incidence.

The actual incidence of the disease is difficult to ascertain since a high percentage of cases are symptom-free, discovered accidentally by mass radiography or on routine x-ray examination.

The disease may affect all age-groups, but would appear to be commoner in children and young adults. The youngest case reported in the literature was in a child of 7 years. Both sexes are affected equally.

Pathological Features.

Examination of biopsy or post-mortem specimens shows the lesions to be pearl-grey, discrete or confluent, and free from gross evidence of necrosis. Histologically, the tissue involved is seen to contain discrete nodules of epithelioid histiocytes, similar to those of tuberculosis, leprosy, brucellosis and berylliosis. The nodules frequently contain multinucleated giant cells of the foreign body type, which generally differ from the Langhans giant cells of tuberculosis in their greater size and larger number, with random distribution of nuclei. Slight central necrosis is often seen but caseation is not a common feature. At the margin of the nodules lymphocytes may be scanty or absent, in contrast with the typical nodules of tuberculosis which are surrounded by dense zones of lymphocytes.

Healing takes place by fibrosis; this spreads from the periphery of the nodules which eventually become completely hyalinised. Longeope\textsuperscript{24} points out that biopsy at this stage may render histological diagnosis impossible unless active granulomata co-exist in the tissue under examination, as the picture may represent the end-stage of other pathological processes. The same histological pattern is produced in all involved organs with monotonous regularity (Ricker and Clarke\textsuperscript{28}).

Functional disturbance will depend on the size which the conglomerated masses of tubercles attain, and on the presence of super-added infection. Injury is largely due to mechanical interference with function, and there is no toxic element involved.
Aetiology.

The resemblance to the histological features of tubereulosis, the fact that some cases terminate in frank tubereulosis, and the occasional finding of tubereule bacilli in the sputum, have led many observers to conclude that sarcoidosis is an atypical form of that disease. The fact that the respiratory tract is more frequently involved than any other system, suggesting that the portal of entry of the unknown agent is via this route, with later generalisation by lymph and blood spread, adds weight to the claims of the tubereule bacillus.

However, terminal tubereulosis is known to occur in many other conditions and notably in another disease involving the reticuloendothelial system, viz., Hodgkin’s disease.

Sarcoidosis is unaffected by the anti-tubereulose drugs, whereas there is a deflate favourable response in the majority of cases to cortisone or its derivatives. The deleterious effects of the cortisone group on tubereulose lesions are well known. This evidence would appear to discount the theory that sarcoidosis is a form of tubereulosis.

Gardner (cit. Longcope and Freiman, 29) notes that silicon dioxide is capable of exciting every tissue response that can be produced by the tubereule bacillus. His illustrations are very similar to those of sarcoidosis of the lung.

Recently Cummings 8 has found that pine pollen has certain chemical similarities to the tubereule bacillus, including acid-fast staining properties. A pine pollen extract provoked tuberulin type skin test reactions in half of a group of patients with sarcoidosis, and it also produced local tuberculoid granulomas in animals.

H. J. Anderson 1 believes that the sarcoid response may be produced by many different antigens and this would certainly seem to be true for localised, isolated lesions.

The vexed question of etiology is summarised in a statement issued following a conference held in Washington (1956):

Sarcoidosis is a systemic disease, or group of diseases, of undetermined etiology and pathogenesis. Histologically it is marked by the presence of epithelioid cell tubercles, showing little or no necrosis. Varying types of inclusions in giant cells may be present but are not pathognomonic. A similar histological picture may be found in certain diseases, especially in infectious granulomas and in beryllium poisoning.

Clinically the disease most frequently involves lymph nodes, lungs, skin, eyes, liver, spleen, and phalangeal bones. The course is usually chronic and constitutional symptoms vary markedly. More specific symptoms when present relate to the tissues and organs involved, etc. (E. R. Long. 29)

As more cases are being reported, it is becoming increasingly apparent that the earliest manifestations of this disease are intrathoracic, and furthermore, that the first structures to be involved are the mediastinal glands. 20 29 24

Enlargement of the peri-bronehial (hilar) glands may occur without any apparent lung focus. In contradistinction to the usual appearance of a tubereulose primary complex, this hilar gland enlargement is always bilateral. Smellie and Hoyle 22 found no incidence of unilateral enlargement in a series of 66 cases. Citron 6 found one apparently unilateral in 36 cases.

Paratracheal node enlargement is frequently present. Smellie and Hoyle noted this in 39 cases, mostly on the right side.