Frank William Simson (1 August 1883–17 December 1948)

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Dr Frank William Simson, a histopathologist at the South African Institute for Medical Research (SAIMR), published the first paper about asbestos-related lung disease in southern Africa in 1928.[1] However, his research was mainly on silicosis and, in conjunction with Dr AS Strachan, he published the first detailed studies of the pathology of the disease, and did much to elucidate its pathogenesis. Their work led to South Africa being recognised as the foremost world authority on silicosis, which was acknowledged by the holding of the First International Conference on Silicosis in Johannesburg in 1930 to study the medical aspects of the disease. All the major concepts concerning the pathology associated with radiological patterns observed in silica-related lung disease were defined in the 1930 record of the conference. These specific patterns are still widely used in modern textbooks and reviews.

Frank Simson was born in Bathurst, Australia in 1883. After farming in Australia and trading in the South Sea Islands, he went to Britain where he qualified with an MBBS at Edinburgh in 1918, relatively late in life. Following his graduation, he went to Sheffield where he worked at the Sheffield Royal Hospital until 1926. He was elected a member of the Pathological Society in 1922. In 1926, he was recruited to join the staff of the SAIMR.

In September 1926, the medical officer at an asbestos mine in (the then) Southern Rhodesia sent him specimens of lung tissue from a man who had died after working in the mill for 12 months. Simson reported that "curious golden yellow segmented structures with rounded or club shaped ends were embedded in the fibrous tissue". The records revealed two more cases referred from the same mine, and interest centred on the golden yellow bodies in the lungs. Simson concluded that the amount of fibrosis was quite marked and, if due to the presence of asbestos dust, the initial rate of production was rapid when compared with non-infective silicosis. Simson subsequently worked closely with Dr AS Strachan and, together, they examined the sputum specimens from 50 mill workers on an asbestos mine. Asbestos bodies were found in 48 of the 50 specimens, and they published their findings in 1931.[2]

In addition to his work on asbestosis, Dr Simson studied silicosis and, in conjunction with Dr Strachan, published the first detailed studies of the pathology of the disease, doing much to elucidate its pathogenesis. Simson carried out the experimental and histological work that identified the dangerous types of dust on the Reef, demonstrated their effects on the animal body, and elucidated the histopathology of the disease in man. Much of our knowledge of the pathogenesis and histogenesis of silicosis in South Africa is due to his patient and meticulous work.

With regard to asbestosis, the following statement was included in the 1930 conference report: "The inhalation of asbestos dust produces a definite pneumoconiosis, which may occur also in association with tuberculosis, and deaths have been recorded."[3] The members of the conference represented the governments of Australia, Germany, Great Britain, Italy, the Netherlands, the Union of South Africa, and the United States of America. The broad outlines of the extent of knowledge in South Africa were therefore made known to this distinguished gathering. By the end of the 20th century, asbestos mining had been discontinued due to the adverse health effects of exposure to the fibres and the use of asbestos in industry, such as building, being banned in many countries.

Frank William Simson
Photograph: J Path Bact, 1949

Later, Simson did much to elucidate the place of various fungal diseases in occupational diseases in South Africa. He was the first to recognise and record histoplasmosis in Africa. He studied the histopathology of sporotrichosis and described the life cycle of the fungus.

He retired in 1946 on account of ill health. In the last two years of his life he built up the Pathological Department at Addington Hospital in Durban. He died in 1948.

SOURCE

Murray JF. Obituary. Frank William Simson. Born 1st August 1883. Died 17th December 1948. J Path Bact. 1949; 61:466-471.

REFERENCES

1. Simson FW. Pulmonary asbestosis in South Africa. Br Med J. 1928 May 26; 1(3516): 885-887.
2. Simson FW, Strachan AS. Asbestos bodies in the sputum; a study of specimens from fifty workers in an asbestos mill. J Path Bact. 1931; 34:1-4.
3. Silicosis. Records of the International Conference held at Johannesburg 13–27 August 1930. Geneva: International Labour Office; 1930.