MISCELLANEA

The Origin of the Term 'Byssinosis'

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The Departmental Committee on Compensation for Cardroom Workers adopted in 1939 the term 'byssinosis'. Since then it has appeared extensively in literature dealing with respiratory disease of textile workers. It connotes an affection of the chest, characterized by the 'Monday tightness' found in those exposed to the inhalation of the dust of cotton, flax, jute, or hemp.

The word byssinosis is derived from the Greek *βύσσαν* or Latin *byssus*. The exact meaning of this word byssus is at best uncertain. It is doubtful whether it originally belonged to the vegetable, animal, or mineral kingdom. Zoologists still use byssus-gland found in the foot of the *Pinna marina* (a bivalve mollusc) by which it and various other mussels attach themselves to the surface of the rocks. Botanists still give the name byssus to the thread-like stripe of some fungi. For the geologist, byssus is an obsolete name for asbestos, although byssolite is still in use as a synonym for asbestoid (*The Shorter Oxford Dictionary*, 1962). The same source gives the commonest use of byssus as 'An exceedingly fine and valuable textile fibre and fabric known to the ancients, it denoted properly a kind of flax, but used also of cotton, silk, etc. . . .'

Baines (1835) quoted Isidore (orig. xix. c. 27) as saying that byssus was an exceedingly white and soft kind of flax, and Jullus Pollax (lib. vii. 12), who said that it denoted the finest flax and cotton, while Pausanias stated (in *Eliacis I*, 1) that byssus grew in Egypt, Judea, India, and Elis (Greece), which was true of flax, but cotton certainly did not at that time grow in any part of Greece. John de Trevisa (1326-1412) wrote 'The Fayrest of al (Flaxe) growyth in Egypte, for thereof is bissus made ryght fayre and whyte as snowe'. Thus, wherever the word byssus is used it means a very fine white silky fibre.

The word 'byssinosis' has been attributed by many authors to Sir Thomas Oliver (1902, 1908), who did not quote its origin. The last author to discuss it was Meiklejohn (1963), who stated that the word byssinosis was invented by Oliver. This is not the case. Going back to 1871, Ludwig Hirt, in the first volume (Part 1) of his book on the diseases of workers, *Die Krankheiten der Arbeiter*, considered (chapter 4, section II) the inhalation of cotton dust, 'Die Einlagerung von Baumwollstaub in die Lunge'. He discussed the clinical history and the pathology of cotton workers' lungs, quoting Van

Coetsem, but he disagreed with Coetsem in calling it 'pneumonie cottonneuse'. Because Hirt classified it as one of the dust diseases he preferred to call it 'pneumoconiosis lyssinotica' and, for short, 'lyssinosis pulmonum'. 'Sollte es sich dann wirklich herausstellen, dass Baumwolle in der Lunge ist, so würde diese Affection nicht mehr als pneumonie cottonneuse, sondern der Gleichmässigkeit wegen vielleicht als Pneumoconiosis lyssinotica (*λύσσα*) oder kurz als Lyssinosis pulmonum, Baumwollenslunge unter den übrigen Staubinhalationskrankheiten zu figuriren haben'.*

It is obvious, however, that he misused the word *lyssa* (*λύσσα*) for byssus (*βύσσαν*). This is surprising from a German scientist because the word *lyssa*, which means rabies in Greek, also means rabies in German. Achille-Adrien Proust (1877) discovered Hirt's mistake: 'C'est à tort que Hirt écrit Lyssinosis. Par une singulière inadvertance l'auteur allemand confond *λύσσα*, rage avec *βύσσαν*, coton.' Proust (1877) used the correct term 'byssinosis' in his article—'Affections pulmonaires succédant à l'inhalation des poussières de coton—byssinosis'—and to him, therefore, must be attributed its origin.

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* (If it is proved that there is cotton in the lungs, this disease would not be called 'cotton pneumonia', but, to be more representative, it may be called 'lyssinotic pneumoconiosis' or in short 'pulmonary byssinosis'; the disease of the lungs due to cotton should be tabled under dust diseases.)