PRIMARY CARCINOMA OF THE LUNG.*

By Charles Bowesman.

As I considered the wretchedness of men afflicted by serious ills, the plight of few appeared more miserable than that of those whose days were numbered by reason of malignant disease of the lung. My sympathy for them grew to interest, and with the interest grew a desire to understand more fully the reason of their ills, if by such knowledge their suffering might be alleviated.

It is thus proposed to set in order some facts concerning the disease, its etiology, the pathology of the primary condition, with its associated secondary changes, and also to indicate the methods of investigation and lines of treatment adopted to ease the distress dependent upon it.

The tendency of the younger medical men appears to be towards an outlook which is possibly more strictly scientific, but for which is being sacrificed the accuracy of observation and precision in description which characterised our predecessors and made such names as those of Stokes and Graves famous throughout Europe.

An inquiry into the subject of primary carcinoma of the lung necessitates the closest co-operation between individual case-histories, personal observations with detailed clinical examination and subsidiary methods of investigation.

Some of the earliest accounts of lung disease, clinically simulating pulmonary carcinoma, come from Saxony, where the condition has been known, though not fully understood, since medieval times. The Schneeberg mining industry in Saxony, which has been carried on since 1410, has had amongst its workers probably the largest percentage of deaths recorded from this condition of any one community of a similar size.

Agricola in 1500 noted the frequency with which miners suffered from lung disease, and suspected that the constant exposure to stone dust probably accounted for the condition.

Adler, referring to the early history of medicine, says that lung tumours were absolutely unknown, and gave to Morgagni

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* The present communication is an extract from a longer paper on the subject. Only a small number of the original photographs are here included. The reference numbers refer to illustrations in the full text. For this paper letters have been used. Four cases only have been criticised out of a series of eleven observed while House Physician at the Royal Sussex County Hospital, 1932-1933.
(1682-1772) the credit of being the first person to record systematically an autopsy where the lung, being extremely hard and adherent to the pleura and mediastinum, was found to be the seat of a cancerous ulcer. Laennec has recorded a reference to a paper on "A Dissertation on Inflammation" where John Burn of Glasgow (1800) described lung tumours under the head of "Spongioid Inflammation." Bayle in 1810 described cases of pulmonary tuberculosis and gave one sub-division in which malignant disease co-existed. Laennec in 1821 described pulmonary tuberculosis and neoplasms separately, and insisted that the two conditions were distinct pathological entities. Huguenin gave an account of the illness of the Marquis of Albany, and recorded the post-mortem notes of the case, from the writings of Boërhaave; death was due to the pressure effects of a large pleural effusion due to a growth of the lung.

Interest in the subject having grown by the middle of the last century, attempts were being made to localise accurately the site of the tumour. With the name of Stokes is associated the accurate description of the cyanotic oedema of the upper thorax and neck, due to pressure on and invasion of the superior vena cava by the growth. This syndrome, observed in two of my cases, still bears the name "Stokes' collar."

The number of cases which to-day come under observation appears to be greater than it was in the past. The larger hospitals now usually have three, four or more cases each year, and in the Poor Law Institutions several may be seen at the same time. Men of long experience, as Sir Percy Hartley, can probably give as valuable an opinion as is obtainable. He states "as House Physician to Dr. Gee, 1893-94, only one single case occurred in the wards, and now it is no uncommon event to see two cases in the same ward at the same time."

Age.—To make any generalisations on a very limited number of cases is logically unsound, but to show how the observations compare with those of larger series is of interest.

The average age incidence is about 50 years.

Davidson (London) ... collected 107 cases, average age 46.4 years.
Duguid (Manchester) ... 173 ... 45.7
Kikuth (Hamburg) ... 246 ... 56.1
Holzer (Berlin) ... 76 ... 52.5
Bowersman (present series) ... 11 ... 54.7

Sex Incidence.—Males appear to be much more frequently affected than females. Various authorities report:

Duguid ... 6.3 : 1
Seyfarth ... 5.5 : 1
Hauf ... 5.2 : 1
Davidson ... 5 : 1
Probst ... 4.4 : 1
Simpson ... 4.0 : 1
Bonser ... 3.5 : 1
Schuster ... 3.0 : 1
Katz ... 2.0 : 1

My cases were in the proportion of 4.5 : 1.

Marchesani makes the significant statement that in 13,367