ANY QUESTIONS?

We publish below a selection of questions and answers of general interest.

Blue Bloater: Pink Puffer

Q.—*In what way are the terms "blue bloater" and "pink puffer" related to patients with bronchitis, and does the distinction have a bearing on treatment?*

A.—This question cannot be answered without a preliminary definition of terms.

Chronic bronchitis refers to a clinical syndrome—that presented by patients who have persistent cough and sputum not attributable to localized bronchopulmonary disease and therefore presumably due to hypersecretion in the bronchial mucosa. Initially patients with chronic bronchitis present no other symptom, but many of them sooner or later become breathless because of increasing obstruction of air flow in the lungs, and indeed, even in the early stages, minor degrees of obstruction can be demonstrated. This functional disturbance can be referred to simply as airways obstruction.

Emphysema is definable in terms of morbid anatomy as a disease characterized by structural changes in the lung beyond the terminal bronchiole leading to irreversible enlargement of air spaces. This structural change also produces airways obstruction. Emphysema may complicate chronic bronchitis and probably may also arise independently. Chronic airways obstruction (disturbance of function), chronic bronchitis (a clinical syndrome), and emphysema (an anatomical change in the alveoli) therefore frequently coexist.

It has been observed among patients with chronic airways obstruction that some tend to hypoventilate and allow their P_{CO_2} to rise. They are liable to recurrent episodes of increased CO_2 retention, cyanosis, and oedema usually associated with a purulent exacerbation of chronic bronchitis or some other intercurrent event. It has been found that these patients suffer predominantly from chronic bronchitis and have relatively little emphysema. At the other end of the range a few patients with chronic airways obstruction maintain their alveolar ventilation so that their P_{CO_2} is normal or even rather below normal, and they remain pink in spite of the evident difficulty that they have in maintaining this ventilation. It has been found that these patients generally have severe structural emphysema and may have relatively mild bronchitic symptoms.[1]

To these polar groups the rather jocular terms "blue bloater" and "pink puffer" were applied, rather informally, some 10 years ago. These terms at that time had the merit of drawing attention in a dramatic way to a distinction which perhaps was not then generally recognized. In order to indicate the correlation of these two functional patterns with the clinical syndrome of chronic bronchitis and the anatomical changes of emphysema respectively other suggestions about nomenclature have been made—for example, B and A types[2] and B.B. and P.P. types.[3] It is important to realize that whatever terms are used to refer to these two types of case they refer to polar groups, and between them all possible combinations of features can be found.

Practical implications are evident. In the "pink puffer," A or P.P. type, irreversible structural change in the gas-exchanging part of the lung is the cause of disability, and infection is rarely an important factor. These patients often present with no symptoms of bronchitis, and the gravity of their disease is at first often underestimated for this reason. Unfortunately their condition is often relentlessly progressive and very little can be done to help them. They develop cyanosis and a rise in P_{CO_2} and possibly oedema only at the very end of their illness. They can generally be given oxygen quite freely, since CO_2 retention is not a prominent feature. The "blue bloater," B or B.B. types, on the other hand, often have recurrent episodes of purulent bronchial infection which need appropriate treatment. They may have recurrent episodes of increased CO_2 retention and oedema in which oxygen therapy must be carefully controlled in order to avoid the dangers of CO_2 narcosis.

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2 Burrows, B., Niden, A. H., Fletcher, C. M., and Jones, N. L., *Amer. Rev. resp. Dis.*, 1964, **90**, 14.
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Buckwheat

Q.—*What if any is the active principle in dried buckwheat (leaf and flower)?*

A.—The active principle of buckwheat is rutin, also known as rutoside, which is chemically related to hesperidin (sometimes known as vitamin P). It is used for diseases associated with capillary bleeding due to undue capillary fragility, though the evidence for its efficiency is inconclusive.

Tests of Personality

Q.—*Are there any brief tests of personality such as might be used in interviewing potential employees in industry and from which information could be transferred to a punch-card system?*

A.—There are two main approaches to assessing personality: (1) through standardized inventories or questionaries (for example, Eysenck Personality Inventory, Bernreuter Personality Inventory); and (2) through clinical, projective techniques (for example, Rorschach Technique, Thematic Apperception Test).

The first yield a score or scores on various dimensions of personality, and their results are easily transferred to punch cards. The second do not yield scores, and much of their diagnostic value would be lost in reducing their results to punch-card format. Compromises have been attempted, however, and the Rorschach Technique, for example, has been modified to give standardized scores.[1]

Test agency catalogues (National Foundation for Educational Research, The Mere, Upton Park, Slough, Bucks) list all the well-known tests and give details of their duration and scoring method. More critical evaluations are given for nearly every published test in the *Mental Measurements Yearbook*.[2] It should be pointed out that all the worthwhile tests are available only to qualified psychologists or to persons experienced in test administration and interpretation. Anyone considering introducing these tests into a selection procedure is advised to seek professional advice such as may be obtained from the National Institute of Industrial Psychology, 14 Welbeck Street, London W.1.

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1 *Management Today*, February 1967.
2 Buros, O. K., *Mental Measurements Yearbook*, 6th ed., 1965. New York.

Searching Stools for Gallstones

Q.—*Is there a reasonably rapid and inoffensive method for searching stools for gallstones which could be conveniently used by nursing staff?*

A.—There is no such method. Small gallstones could be searched for only by the slow and offensive method of passing the faeces through a sieve in the same way as the head of a tape-worm is sought. Even when suspected stones have been separated they would have to be subjected to laboratory analysis to show that they were gallstones and not faecal pellets or faecoliths.

Large stones which have entered the gut by fistulation from the gall bladder to the duodenum or the colon are more obvious, but here, too, laboratory analysis is essential, since stercoliths can easily cause confusion.

Magnesium sulphate and olive oil have been used for decades as a means of encouraging stones to pass from the gall bladder and common bile duct.[1] However, on this regimen small pellets of faeces are formed which look as though they were gallstones—an illusion used by the itinerant quacks of the past to persuade their patients that a cure was being effected.

REFERENCE

1 Rains, A. J. H., *Gallstones. Causes and Treatment*, 1964. London.

Phenytoin in Depression

Q.—*Is phenytoin of any proved value in the treatment of depression?*

A.—Recently there have been suggestions[1] that phenytoin may be helpful in the worrying, irritable patient, frequently with headache and pains in the back of the neck, who so often has accompanying depressive symptoms.

Antidepressants are thought to act by increasing the concentrations of active amines in the brain, and it is interesting that phenytoin, like other anticonvulsants, can increase the concentration of 5-hydroxytryptamine in the brain.[2] However, the reports of its clinical efficacy in depression are in the nature of very preliminary and largely uncontrolled investigations.

REFERENCES

1 *Int. J. Neuropsychiat.*, 1967, **3**, Suppl. No. 2.
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