Editorial

A Problem in Palaeopathology

The Origin of Thalassemia in Italy

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Summary. Palaeopathology makes possible investigations into the origin of diseases. So the aim of this editorial is to explore all the palaeopathologic remains supposed to be related to the origin of thalassemia in Italy. This last is a problem which has led to much speculation. Two theories have been proposed. The first sees the earliest evidence of thalassemia as going back to the upper Palaeolithic era, and the second suggests that thalassemia originated in Greece and spread to Italy when it was colonized by the Greeks between the 8th and 6th centuries B.C. The second view seems to be supported by the fact that at present the incidence of thalassemia is highest in the areas where ancient Greek immigration was most intense – Sicily, Sardinia, Calabria, Lucania, Apulia and the mouth of the Po.

The conclusion is drawn that all the skeletal remains showing porotic hyperostosis found so far in Italy are unable to provide a solution to the problem of the origins of thalassemia in this country, owing to the impossibility of reaching a clearcut decision as to whether to accept or reject a diagnosis of thalassemia. This difficulty derives from the fact that porotic hyperostosis is common to a large group of haematologic disorders involving erythroblastic hyperplasia, especially if the disease develops at an early age. So, it appears obvious that, when haematological findings are not available, data of other type should be considered in the attempt to identify – as far as possible exactly – the nature of the blood disease responsible for the skeletal changes in each case. Some main methodological principles are considered in order to make investigations more rewarding in future.

Key words: Palaeopathology – Porotic hyperostosis – Thalassemia.
The term "palaeopathology" was coined to refer to the study of traces of disease in ancient human remains, by M.A. Ruffer (1913) when Professor of Bacteriology at the Cairo Medical School.

Palaeopathology has become a wide-ranging science covering the vegetable as well as the animal kingdom. Several previous publications have reviewed the field of animal and human palaeopathology in detail. The first proper survey was published by Moodie in 1923, and in 1930 a book by Pales provided the most thorough bibliography and discussion of palaeopathology up to the second world war. The next indispensable book-length survey and bibliography (updating the literature from about 1930 to 1944) was that of Sigerist (1951). Since then a fair number of valuable shorter reports on the subject have been published. Those of Brothwell and Goldstein are chapters in the book "Science in Archaeology" (Brothwell and Higgs, 1969). Two symposia have also appeared, edited by Jarcho (1966) and Brothwell and Sandison (1967). The quite recent volume by Steinbock (1976) offers a rigorously scientific approach to the diagnostic and inductive facets of ancient human pathology.

Impetus was given to palaeopathological studies by Cockburn, who founded the Palaeopathological Association in 1973; in Europe, international meetings were held in London (1976) and Turin (1978).

The essential precondition for such studies is, clearly, the availability of remains in a satisfactory state. Most ancient populations buried their dead underground; in this case only skeletal remains, at best, have come down to us. Others practised cremation, which leaves the investigator almost nothing to work on. Embalming is a rare practice, but it is of enormous importance, as it is capable of keeping even soft tissue in an excellent state, and has allowed much valuable work to be done on pathological findings. From a palaeopathological viewpoint, mummies offer incomparably more interesting material than the much more readily available skeletons, whether complete or incomplete, since these only yield pertinent data where diseases have produced bone lesions.

The ultimate purpose of palaeopathology is still a controversial topic. This science provides a valuable source of data for archaeology by offering insights into the vigour and way of life of a given people. Thus the connections between ancient Greek culture and the physical condition of its people have been explored by Angel (1946 and 1966). Other authors have considered palaeopathology as being ancillary to the history of medicine, and as being especially valuable in understanding prehistoric ages for which no written documents are available. In any case, as pointed out by Cockburn, palaeopathologic remains certainly offer useful material for an objective evaluation of the true state of medicine and its evolution during the historical epoch.