

News, Notes and Queries

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AN EXAMINATION OF THE SKULLS IN THE CATACOMBS OF PARIS

LITTLE is known about the early history of leprosy in Europe, and although it is generally believed that the highest incidence of the disease was in the Middle Ages, there is very little reliable evidence on which medical historians can base an opinion. The only way of obtaining definite evidence on this subject is to make use of the fact that the lepromatous type of leprosy causes permanent and characteristic changes in bones, and one means of obtaining such evidence is the difficult and laborious task of locating medieval graveyards and examining their contents. One of us has carried out such a study in Denmark,^{2, 3} and has established the value of examining the skull in surveys of this type. Another way of gaining information is to study ready-made collections of bones wherever they may be found, for example, the Catacombs of Paris and Rome, and the various museums exhibiting bones; but this is not likely to prove of value unless their origin and age are known.

In order to discover if an examination of a large collection of skulls would supply information on the past incidence of leprosy, we decided to pay a visit to the Catacombs of Paris, and the Scientific Office of the French Embassy in London kindly arranged for the necessary permit and for the services of a guide.

The Catacombs

During the eighteenth century the people of Paris made repeated protests that the 'Cemetery of the Innocents', which had been in existence for many centuries, constituted a public health danger, and in 1785 the authorities demolished the cemetery and removed the contents to the old stone quarry of Paris—a vast underground system of tunnels and passages. The work of transferring these skeletons took fifteen months, after which the new subterranean site received the contents of other cemeteries as well as the bodies of those massacred during the French Revolution.

The visitor to the Catacombs descends ninety-one stone steps (62 feet) before

reaching the level of the tunnels, and after traversing a long and tortuous passage, arrives at a massive iron door above which the following inscription can be read by the light of the guide's acetylene lamp:

'Arrête! C'est ici l'empire de la mort.'

On the other side of this door lies the dark and silent empire of six million dead.

Our Observations

We found that skulls and long bones were neatly stacked from floor to ceiling on either side of all the passages open to inspection (Fig. 1). There were notices indicating the origins and dates of the various bony collections, but our guide informed us that we could not rely on their accuracy. We could not be sure, therefore, that the bones grouped together under the inscription 'L'ancienne léproserie de la rue Douai' were actually the bones of leprosy sufferers. We were disappointed that none of the collections appeared to belong to an era prior to the seventeenth century.

Our objective was to examine as many skulls as possible and to look for evidence of *facies leprosa*, namely, atrophy of the anterior nasal spine either alone or combined with central atrophy of the maxillary alveolar process and inflammatory changes in the superior surface of the hard palate (Figs. 2, 3 and 4). These changes are seen in advanced lepromatous leprosy and have been fully described by Møller-Christensen.³ At the same time we looked for evidence of other pathological changes such as syphilis (Fig. 5).

We examined a total of 5,283 skulls, all that were available and intact, but found no signs of leprosy. Four (0.08 per cent) showed syphilitic changes, but we were told that Dr. P. Broca, at the end of last century, had removed all the syphilitic skulls he could find. 214 (4 per cent) showed evidence of loss of all the teeth during life.

We tried to find Dr. Broca's collection at Le Musée de l'Homme but we were told that the skulls had been distributed among several medical museums. However, we examined all the skulls in the museum, 242 in all, but found no signs of *facies leprosa*; one showed syphilitic changes. As with the bones in the Catacombs, exact dating was impossible.

Therefore it is not possible, from an examination of the skulls in the Catacombs, to draw any conclusion regarding the history of leprosy or syphilis.

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