of diseases. Stanley Colyer has published a book⁵ taking the opposite view, and regards the alveolar bone in all cases of pyorrhoëa, even where no pus is obvious, as infected. Unfortunately, in the cases he cites as evidence of improvement in health following extraction, he fails to distinguish between non-vital and vital teeth, and this seriously impairs their value. Lazarus-Barlow⁶ found that over 80 per cent. of cultures taken from the bone below the floor of a pyorrhoëa pocket were sterile.

While it remains true that active pyorrhoëa does not adversely affect the general health as much as was formerly believed, and far less frequently than apical infections, it is not to be thought that it is wholly innocuous. Its ill effects are most often seen in diseases of the digestive tract, as its toxic products drain into the mouth rather than into the blood; very few cases have occurred in my clinical practice where diseases of the rheumatic group were produced.

The relatively innocuous nature of pyorrhoëa compared with apical infections is usually explained as the difference between an open and a closed infection, the toxic products

of pyorrhoëa draining freely into the mouth and the bacteria being killed by the gastric juices, while the toxic products of apical infections must of necessity find their way into the system. But there is another and more significant difference between the two conditions. An infection of the gums is freely exposed to all the defensive mechanisms of the body, phagocytes, antibodies, and antitoxins, which in most cases constitute an adequate defence. But an infected pulp chamber constitutes a stronghold for bacterial growth, completely protected from all the natural defence forces of the body, where germs can multiply and discharge their toxins and themselves into the system with impunity.

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NOTES ON A PEDIGREE OF AMAUROTIC FAMILY IDIOCY (TAY-SACHS DISEASE).

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INTEREST in this disease appears to have waned during the past twenty-eight years, and references to the condition are as few during this period as they are plentiful in the twenty years succeeding its first description by Warren Tay in 1881. The condition has apparently been shelved as incurable, largely because it seems to develop prenataly, and it has been impossible previously to forecast that the offspring of any particular Jewess was liable to this affliction.

It has been my good fortune to see at the Hull Victoria Hospital for Sick Children a case of this disease which has proved on investigation to represent the second generation of the classical R— family. Their vicissitudes were recorded by Mr. Kingdon of Nottingham; of twelve children, six died of this complaint, and in two cases extensive *post-mortem* examinations were performed by Dr. Risien Russell.

Of the remaining six, the eldest daughter is unmarried; the elder son has one living child, one pregnancy terminated apparently in a "mole," and one other child died of meningitis secondary to mastoid trouble. My

patient was the second child of the next daughter. I do not intend to report the case fully, as it followed so typically the abler description of its uncles and aunt published by Mr. Kingdon in Volume 80 of the *Transactions of the Medico-Chirurgical Society*. Though flaccid throughout, the patient died convulsed. A boy born to the same mother seven years ago is alive and well.

The next son has married recently, shortly before he knew of the dangerous heredity, and he is disinclined to procreate on this account. The next living member of the family is a woman, who has a healthy daughter aged 2½ years, and is pregnant for the second time, expecting to be delivered in April. The last is a woman of 21, and unmarried.

My object in publishing this pedigree is twofold. First, I consider that the appearance of the disease in the second generation is of general interest, and if it should occur elsewhere in the family it will be important to determine whether or no the succession is solely through the distaff line. Secondly, I desire the consensus of opinion of my colleagues on the manner they think best of meeting the situation. Should Jacob practise rigorous contraception? Should Rachel be advised against matrimony? Will the profession offer any suggestions as to the ante- and post-natal treatment of Pauline's expected child, and any future pregnancies of hers, Rebecca's, or Rachel's if she marries? Kingdon suggested that the dietary of the mother be investigated, and that the babies be weaned from birth, but that was at a time when the disease was regarded as familial rather than hereditary.

* Other members of this family have no abnormal history so far as known.

† *Transactions of the Ophthalmological Society*, vol. xii, p. 126. Quoted in the *Transactions of the Royal Medical and Chirurgical Society of London*, lxxx, 87.

‡ *Transactions of the Ophthalmological Society*, xiv, 129. *Transactions of the Medico-Chirurgical Society*, lxxx, 87.

§ *Transactions of the Royal Medical and Chirurgical Society of London*, lxxx, 87.

|| *Ibid.*, Addendum.