PERSISTENT LACTATION WITH A NOTE ON CHIARI AND FROMMEL'S DISEASE

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The purpose of this brief communication is to draw attention to a case in which lactation had been established for the extraordinarily long period of fifteen years. Little is known of the pathology of this condition. The literature on the subject is mostly related to the association of persistent lactation with utero-ovarian atrophy. From this aspect the condition has been studied by Chiari, Braun, and Spaeth (1852-5), Frommel (1882), and more recently by Sharp (1935).

Between 1848 and 1855 Chiari, Braun, and Spaeth contributed a series of gynaecological articles from the Vienna clinics; in these Chiari discussed at some length the association of genital atrophy with prolonged lactation, and it appears that Simpson (1872) and Schroder were familiar with the syndrome. Chiari discusses two cases of puerperal utero-ovarian atrophy accompanied by persistent lactation. Frommel investigated a series of 3,000 labours and puerperia, and arrived at the conclusion that the incidence of uterine atrophy was not more than 1%. In his series the ages of the patients exhibiting the syndrome varied between 19 and 40 years, the average age being 29.6 years. Frommel believed the condition to be most common in women who had had numerous pregnancies, but it may arise after first babies.

The association of persistent lactation with utero-ovarian atrophy is known to some writers as Frommel's disease, but it would appear to be more correct to call it Chiari and Frommel's disease in view of the early writings of the elder Chiari.

Clinical observations indicate that persistent lactation and utero-ovarian atrophy coexist as described by Chiari, Frommel, and others; in some cases lactation may persist for longer periods than usual without evidence of genital atrophy, whereas in others genital atrophy may take place in the absence of prolonged lactation. Frommel records the case of a young woman who after her first pregnancy failed to lactate, but whose genital organs showed marked atrophy.

In Chiari and Frommel's disease atrophy of the uterus is always present, but the degree of atrophy varies from case to case. In some cases the uterus is very small and thin, the length of the cavity in one of the recorded cases being reduced to no more than 4.5 cm. The atrophic process also attacks the cervix, this organ having the appearance characteristic of senile women. In the majority of women suffering from this condition the ovaries are small and atrophic. Of Frommel's 28 cases only 3 had ovaries of normal size.

Menstruation does not always appear after weaning in cases in which this disease develops. It would seem that the development of amenorrhoea depends upon the degree of atrophy which has been attained.

The essential features of Chiari and Frommel's disease are therefore two in number—namely, utero-ovarian atrophy of variable degree, and persistent lactation which also varies in degree as demonstrated by Frommel's case; some women may have amenorrhoea as an additional feature.

Record of a Case of Persistent Lactation

The patient was a married woman 35 years of age. She had one child, aged nearly 16 years. Hospital advice was sought regarding the discharge of blood-stained milk from the left

nipple which had been noticed at intervals during the previous three months. Further inquiry elicited the information that she had lactated continuously since she had weaned her baby—namely, for a period of fifteen years.

Examination revealed mammary glands which were rather voluminous, and it was found that milk could be expressed from each of them with the greatest ease. A few red blood cells were present in the milk first obtained from the left breast. Nothing abnormal could be palpated in the substance of the breast. At the time it was thought that the presence of blood might be due to a duct papilloma or possibly to the rupture of small varicose veins within the breast.

Pelvic examination showed that the uterus was rather smaller than one would expect, firm in consistence, and normal in position. The menstrual losses lasted about four days and occurred at intervals of about a month. The menstrual periods had reappeared about six months after the birth of the baby, and had been constant since that time. Other than the features already mentioned, no evidence of disease of the pituitary gland was discovered.

It was apparent that the patient believed it to be perfectly natural for a woman who had borne a child to lactate for the remainder of her reproductive life, and she did not deny that it was her custom to stimulate the production of milk by expressing it manually every day.

Commentary

This case is of interest in so far as it is one of those rare examples in which lactation persists for many years—in this instance for fifteen years after weaning the baby. It is hardly to be regarded as a case of Chiari and Frommel's disease, as the degree of utero-ovarian atrophy is of a minor nature—certainly not so profound as to cause any menstrual changes. Nevertheless other writers have pointed out that the degree of atrophy varies from case to case, and it is possible that this patient is an example of the mildest variety of genital atrophy associated with prolonged lactation.

It is of especial interest to note that daily manipulation of the breasts had been practised by the patient, and it is possible that this may have been just as influential in prolonging lactation as it is in the case of certain well-known domestic quadrupeds.

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Medical Memoranda

The Blood Supply of Human Heart Valves

Accurate knowledge of normal structure is important in clinical medicine, as anatomical characteristics often throw light on or suggest explanations for some of the mechanical components concerning the localization of disease processes within the body or a tissue. The structure of normal human heart valves, for example, must be properly understood before the histological basis of the pathogenesis of valvulitis can be appreciated.

In view of the importance of such knowledge it is unfortunate that three recent textbooks (Baitsell, 1940; Grant, 1940; Maximow and Bloom, 1939) depict normal human atrio-ventricular valves as containing a richly anastomosing network of blood vessels extending from their bases to the free margin. All quote the authority of Bayne-Jones (1917), and all reproduce the drawing made for him by Max Brödel. It is a semi-diagrammatic figure based on the injection of several specimens and purporting to give a "composite picture of the typical vascular anatomy of a completely injected human mitral or tricuspid valve." The reason for the production of such a composite figure is in itself puzzling, as Bayne-Jones laid no claim to have succeeded in making a complete injection in any valve or cusp.