## III.—ON NUMERICAL ANOMALIES OF THE BREASTS—WITH REMARKS ON THE CAUSES OF DEFORMITIES.

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[Read before the Glasgow Medico-Chirurgical Society.]

The subject of numerical anomalies of the breasts may not be uninteresting to the members of the society, from the comparative rarity of such deformities, especially as I am able to submit an interesting case to your inspection to-night. In order to provoke a discussion I shall add some remarks on the causes of deformities in general, and the influence of maternal impressions on the fœtus in utero.

Mrs Hamilton, aged 37 years. Has had ten children, and was confined July 8th, 1874, of a strong healthy female child, who had the following abnormalities.\* (The measurements were taken when she was three years of age.) Has three mammæ, the supernumerary one being on the left side and under the normal one. The nipples and areolæ of those on the left side are equally well formed, of about the same size and colour; they are one and a half inches from each other, and at an equal distance from the median line. The undermost one is on a line with the apex of the ensiform cartilage. The right nipple is on a line midway between the two on the left. The left shoulder is slightly higher than the right, and there is a projection about the middle distance between it and the spine, which is the superior angle of the scapula. On the posterior surface, the scapula is higher from its spine upwards than normal, so that the inferior angle is two inches above that of the right side. There is also slight flattening over it. The superior angle of the scapula is slightly curved on itself towards the ventrum. On the left arm being elevated, a depression is seen on the side. The inclination and curvature of the ribs are abnormal. The third and fourth ribs anteriorly are more prominent, but these, as well as the fifth and sixth, are not so curved as the others, and the sixth and seventh ribs seem to be united. I cannot detect whether there is any absolute absence of the ribs, but apparently there is some deficiency of the muscles. The circumference of the right side from the spinous processes of the vertebræ to the median line anteriorly is ten inches,

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<sup>\*</sup>A photographic illustration of this case is inserted in front.

whereas that of the left over the depression is only eight and a half inches. All the other members of the family were normal, and no deformity known to be present on the side of either parent.

Numerical increase and decrease of the breasts, or Polymastia and Amastia, have been observed in the female sex, but only the former in the male sex, so far as I have seen from authorities. Polymastia is not extremely rare in the

female sex, but is so in the male.

Its rarity in the male sex may be surmised from the fact that when Dr P. D. Handyside¹ reported some instances of it, he was not aware of its ever having been observed. M. Geoffroy St Hilaire says,² "it is very rare to see any variation in the number of the lungs, kidneys, ovaries, Fallopian tubes, vesiculæ seminales, and testicles. The mammæ, whose binary number and symmetrical disposition are in man similar [rapprochent] to those organs, vary like them very rarely; however, in some subjects we find only one, and in others none at all. Increase of the number of the breasts is on the contrary not very rare, and we may say that in females it is more frequent than all the preceding anomalies together." August Förster,³ who is the best modern authority on deformities, says, in his concise but complete work, "that of the viscera, the female mammary glands are about the most frequently supernumerary, and again, in rare cases, we find supernumerary male mammary glands."

Animals provided with mammæ have been grouped into the class, Mammalia. It would, therefore, be a strange anomaly if a member of that class should be without these

organs.

This has never been observed, according to Velpeau, except in such malformations of the thorax as are incompatible with life, and I have not seen any cases recorded, though St Hilaire says it exists. According to Buffon, "It is necessary, in order that the breasts should be well placed, that there should be as much space between the two nipples as there is from the nipple to the middle of the fossa of the clavicles, so that these points should form an equilateral triangle."

<sup>&</sup>lt;sup>1</sup> Journal of Anatomy and Physiology, vol. vii., 1873.

Histoire des Anomalies, T. I., p. 710.
Die Missbildungen des Menschens, s. 48.

<sup>&</sup>lt;sup>4</sup> Dict. Ency. des Sc. Med., T. XIV., Art. Mammelles, 1866. <sup>5</sup> Dict. des Sc. Med., T. XXX., p. 376, 1813.

According to M. Percy, the author of the best monograph on the subject, and who is universally quoted, "There have been in all times and in all countries women with multiple breasts, but in ancient Idalium, and formerly in Greece and Egypt, this phenomenon was more common than elsewhere. He states that he thinks he has read that Junia, surnamed Mamea, daughter of Junius Avitus and mother of Alexander Severus, had also an excess of breasts." In more recent times, polymastia is said by A. Bouchacourt to prevail more in the Antilles than in Europe, and M. Deprépetit told M. Percy that he had seen several cases there. Birkett<sup>3</sup> attributed its prevalence in Greece, &c., to the influence which the imagination exerts upon the pregnant woman whilst contemplating the statues of Isis and Diana, which are represented with numerous mammæ.

Percy is of opinion that the number of the breasts is not proportioned to the number of the young, but St Hilaire thinks that "amongst mammals there exists, in almost all species, a remarkable relation between the number of mammæ and the number of young which are born in the same litter. This relation would lead us to think that the existence of supernumerary mammæ in woman would portend for her multiple accouchement." 4 M. Tripier 5 thinks "there is almost always a perfect concordance between the number of mammæ and of the individuals composing the litter, in order that each of them may easily find its nourish-

ment."

Some multimammic women have imagined that they might have more than the usual number of children at a birth, and M. Percy relates the history of a rich and beautiful heiress, who had four breasts, and had this fear. She married only after having consulted a physician at Basle and the Faculty at Tübigen. They assured her she would have accouchements like other people, and this opinion was confirmed. If this case had been decided differently, it would have taken away the name posterity of one of the best houses in Switzerland.

St Hilaire states "he cannot conceive how the increase of the number of the mammæ, an anomaly which modifies, in no way, the conditions of the essential organs of genera-

Dict. des Sc. Med., T. XXXIV., p. 525-31.
Dict. Ency. des Sc. Med., T. XIV., p. 419.
Diseases of the Breast. 1850. p. 21-7.

<sup>4</sup> Loc. Cit.

Dict. Ency. des Sc. Med., T. XIV., p. 371.

tion, could become the cause, or even the indication, of an extraordinary fecundity; and we see, besides, each year, some women who have, as ordinarily, only two breasts, confined with more than two children."

There have been cases recorded in which one, three, four, and five mammæ were present respectively. So far as my researches go, I have seen notice of one case only in which five breasts were present, and this was observed by M. Gorré.

The cases in which only one was present come next in unfrequency. Those instances in which three are present are said by nearly all previous writers, to be most numerous but I think the examples in which four existed are fully as numerous. In the male sex, the cases in which four were present are certainly the most numerous, and, as stated previously, amastia has not been observed in the male sex.

As to position: the case which had five mammæ had two placed symmetrically on either side of the chest, and the fifth was situated on the median line, five inches above the umbilicus. In the female sex, in those cases which have four, the supernumerary ones are most frequently situated in the vicinity of the axilla, but sometimes under the normal ones. In the male sex they are always under the normal ones, and most frequently situated on the belly, hence called by German observers ventral nipples (Bauchwarze.) The cases which possess three have the abnormal one most frequently on the left side, near the axilla, under the normal one, or in the median line on the same level or under, except in those very abnormal cases which I shall refer to. those cases possessing one, it is usually placed in its normal An anomaly much more remarkable, but also much rarer, is the development of a supernumerary mamma in the inguinal region, as seen by M. Jussieu. A case of this kind has been observed by M. Robert' in a woman. The supernumerary mamma was placed on the outer part of the left thigh, four inches below the great trochanter, and was about the size of half a lemon. Saunois' says a monk of Corbie saw a female peasant with four breasts, two of which were situated on the back; and Manget saw a case. There is another case quoted by Meckel<sup>5</sup> from Bartholin.

<sup>&</sup>lt;sup>1</sup> Lancet, XII. 618.—Philomatic Society.

<sup>&</sup>lt;sup>2</sup> Journ. Génér. de Méd., T. c., p. 57. <sup>3</sup> Thèse. Paris, cit. in Dict. des Sc. Méd., T. XXX., p. 376., &c.

<sup>4</sup> Dict. Ency. des Sc. Méd. T., XIV.

<sup>5</sup> Pathologische Anatomie. Bd. II., p. 34. 6 Bartholin. Eph. Nat. Cur. Ann. II., ob. 72.

Their presence on the back has been questioned by St Hilaire, but he adds that it would realise in man a curious peculiarity

of organisation in some rodents.

The supernumerary breasts are seldom as large as the normal ones, and in most cases are very small. When they are median they are scarcely developed, even during lactation; on the contrary, when lateral they furnish milk like the normal ones. In the cases already referred to which were observed by Jussieu and Robert, they both furnished milk, and the children drank from them alternately. Some of the women had a natural aversion to put the child to the abnormal breast. The supernumerary mammæ in males are nearly always smaller than the normal, and especially is this

the case when they are placed on the belly.

It will be seen from the notes of the cases to which I shall refer in the course of this paper that a very large number of the cases were casually discovered from information by friends, or were accidentally observed by doctors while examining the patient for some disease or injury. It will also be seen that the possessors of this malformation were, in some instances, not aware till they became pregnant, or till they commenced to nurse, that they were different from other people. In M. Robert's case, up to the time of her grossesse, the mamma was mistaken for a simple nævus, but it increased at the same time as the thoracic mammæ. At the end of lactation, the accessory breasts return to their previous rudimentary state. When the child is drinking from the normal breast, when it is near the supernumerary one, the milk flows from both at the same time, and one case came under observation owing to this fact.

Polymastia and amastia seem to be hereditary, as proved by the following observers:—M. Robert saw a daughter whose mother was multimammic, and Dr Bathurst Woodman<sup>2</sup> saw a mother, upon questioning whom he found that her eldest daughter, whom he saw, had also three nipples. Then Dr Lousier3 mentions the case of a lady wanting a mamma who transmitted this vice of conformation to her daughter. Lastly, this abnormality was seen to occur by Dr P. D. Handyside,4 on two brothers, and this would seem to point to a hereditary origin, though it did not exist, so

far as known, on the bodies of either of their parents.

<sup>&</sup>lt;sup>1</sup>Loc. Cit.

Trans. Obstet. Soc., Lond. Vol. IX., p. 50. 1868. Dissert. sur la lactation, p. 15, An. X.

Loc. Cit.

As the cases of males having supernumerary mamme are

so few, I shall commence with them,

MM. François et Brandin, employed in the expedition of St Domingo, recognised this abnormality—the one in an artillery lieutenant who was killed, and the other in a young surgeon of the Hôpital de Val-de-Grâce, upon whose tastes and manners there have been furnished some interesting details in the "Mémoires de la Société Médicale d'emulation. Dr Gardeur<sup>2</sup> says he saw men with it in this same expedition. R. E. Fitzgibbon, surgeon, saw a man named D. M'Corqudale, aged 24, a native of Lucca, who had two supplementary nipples on each side, about an inch below the normal ones. There were also two pigmentary deposits, one on each side above the normal nipples. When a boy the supplementary mammæ were larger than the others, and when bathing boys used to annoy him by pulling "these things," as he expressed it. He had also congenital shortening of left leg. In a note, the then Editor refers to an instance occurring in the male, on the authority of Dr Santesson, of Stockholm, which is said to have been published in the proceedings of the Swedish Medical Society.

Dr Bathurst Woodman's saw a brewer's man, aged 36, admitted to London Hospital for pneumonia, who had three nipples, the extra one being on the left side. It was one and a half inches below the left breast, and over one and a quarter inches within a vertical line drawn through that. It was a little less than the others, but had a distinct areola,

erectile tissue, and a rudimentary gland could be felt.

Dr Max Bartels saw by chance, on the person of a patient 44 years old, upon whom he was putting a gypsum bandage for fracture of upper thigh, a double growth of breasts.

Dr P. D. Handyside saw two cases. One of them was a pupil, aged 20, who presented himself, February, 1872. He is the eldest of a family consisting of five males. mammæ proper were normally situated, exactly four inches distant from the mesial line, and more fully developed than The lower mammæ were situated exactly three inches from the mesial line. The third son, who is 17 years

<sup>2</sup> Dict. des Sc. Méd., T. XXXIV.

Journ. de Médicine, publié l'an II., à St Domingo.

<sup>&</sup>lt;sup>3</sup> Dublin Quart. Journ., Vol. 29, p. 109. 1860.

Dublin Quart. Journ., vol. V., p. 267. New Series.

Reichert and du Bois-Reymond's Arch. 1872. S. 304.

Loc. Cit.

of age, had also quadruple mammæ, and these were placed much the same as in his brother's case. No similar abnormality is known to have existed in their parents' family on either side.

He also relates another case which was accidentally seen by Dr A. Mitchell in Glen Urquhart, Inverness-shire, in a male farm servant, aged 27 years. The lower mammæ were about a hand's-breadth from the normal ones, and equally distant with them from the mesial line. The lower ones were less

developed than others.

In a second article by Dr Max Bartels, which is one of the ablest and most exhaustive that has appeared in recent years, he quotes Dr Handyside's cases, cited by Darwin in his work on the "Descent of Man," as well as another case by Wenzel Gruber, of St Petersburg.<sup>2</sup> This case, strange to say, also occurred in a student, who presented himself to Gruber in March, 1874. The arrangement and position were much the same as in Dr Handyside's cases. Dr Bartels adds that there are only seven cases on record as occurring in the male, but it will be seen, allowing only one case to Dr Gardeur, and that the case with five breasts which he cites is correct, that there are twelve at any rate. Dr Bartels gives a very reasonable explanation for the small number of cases reported in the male, viz., the diminutiveness of these organs, which thereby escape observation. This is more than probable, for they are often unobserved in females, as already stated, till the organs enlarge during pregnancy or lactation.

The cases in females being more numerous, I shall content myself by merely mentioning them, unless they be of particular interest.

The only case in which five breasts existed was observed by M. Gorré, a skilful military surgeon, and it is described in detail by M. Percy.<sup>3</sup> The woman was a vivandière, and was found in the year 1808, amongst the numerous prisoners taken at Cremsmunster, in Austria, by the right wing of the French army; she died immediately afterwards of hunger and cold. The autopsy is minutely described. The position of the mammæ has been already mentioned: four of them were very prominent and full of milk; each of them was terminated by a very large and elongated nipple, and surrounded by a very dark areola. The fifth was not more voluminous than that of a young girl.

Reichert and du Bois-Reymond's Arch. 1875. S. 745.

<sup>&</sup>lt;sup>2</sup> Virchow's Arch. Bd. 63, p. 99. <sup>3</sup> Loc. Cit.

There is a curious case in which four breasts were present, two being placed symmetrically on each side of the chest, and which became celebrated by Voltaire noticing it in his "Philosophical Dictionary." She had also a peculiar projection, something like a cow's tail, which is stated by St Hilaire to have been placed in the median line, lower down, and between the lower breasts, but which M. Percy states was placed over the coccyx. But on consulting the Dictionary1 I find that St Hilaire is correct. Voltaire says: "Tai vu une femme à la foire qui avait quatre mammelles et un queue de vache à la poitrine. Elle était monstre sans difficulté quand elle laissait voie sa gorge, et femme de mise quand elle la cachait." nature of this projection was unknown.

J. F. Lynceus<sup>2</sup> states that he went from curiosity to see a Roman woman with four beautiful breasts ranged one above the other in a regular manner. There was an old ugly woman in the village of Pfullendorf, in Germany, who had four breasts which were placed symmetrically, and who went about exhibiting herself.3 M. Champion, of Bar-le-duc, communicated a case to MM. Percy et Laurent', in a woman who was delivered of her fourth child Feby. 15th, 1818. Dr Gardeur<sup>5</sup> relates a case of a mulatto girl called Aglaé, aged 19 years, a native of Cape-François, the daughter of a white and negress, who had four breasts, the two supernumerary ones being in the arm pit. Various other older observers have recorded cases having four breasts, as Cabrol, Lamy, and Faber.8 The first case recorded in this country was by Dr Robert Lee.9 "Mrs ----, aged 35 years, was delivered of a still-born child on the 21st July, 1835. Her friends told me that she had four breasts, and after long entreaty I obtained leave to inspect them, and was surprised to find that there were two on each side, the two of the same side being separated by a deep oblique depression. The inferior or pectoral mammæ, as they were afterwards termed by Sir A. Cooper, were fully developed and in the natural situation, and their nipples, areolæ, and glands presented nothing unusual in

Dict. Philosophique, T., VI., p. 139. Art. Monstres.
Dict. des. Sc. Med., T. XXXIV., p. 525.
Dict. des. Sc. Med., T. XXXIV., p. 525.
Dict. des. Sc. Med., T. XXXIV., p. 525.
Dict. des. Sc. Med., T. XXXIV., p. 525., and Corvisart Jour. de Med., T. IX., p. 378.

Fantoni Anat., p. 267.

s In Recchi Thesaurum, and Eph. Nat. Cur., An. II., p. 396.

Med. Chi. Trans., Vol. XXI., p. 266.

their appearances. Near the anterior margin of the axilla, a little higher up on each side, was situated another mamma, about one-sixth the size of the others. The nipples of these were small and flat, but when gently pressed, a milky fluid, which had all the characters of the milk secreted by the other breasts flowed copiously and readily from several ducts which opened on their extremities." The next case is an interesting one reported by P. Shannon. "Annie Merriman, aged 34 years, was delivered of her sixth child. Soon after her accouchement, the attendant informed me that this woman had four breasts, and that they all contained milk. the nurse's statement to be perfectly true. The supernumerary breasts are placed one at either side, very near the margin of the axilla, and are about the size of a large goose egg, or one-sixth of the true breasts, which in this woman are largely developed. Their position is such as to interfere with the motions of the arms. The right supernumerary breast has two nipples. The milk flows from both breasts at the same time. From some superstitious feeling, this woman could never be prevailed upon to nurse any of her infants at the smaller breasts. None of her relations present this anomalous condition. She says the supernumerary breasts were first discovered about the period of puberty, and that they have always enlarged in proportion to the true breasts during pregnancy and lactation. When she stops nursing, they speedily diminish in size."

Chatard saw in a woman nursing, two supernumerary breasts under the normal ones. Van der Hoeven's observed in a woman, two accessory breasts which were situated under the normal ones, and like these were feebly developed. One of the most recent cases was observed by Dr Ashburton Thomson4 who exhibited the child at the Obstetrical Society, London; it had, besides the supernumerary pair of mammæ, a scar-like mark on the scalp.

I need only mention those very abnormal cases which

had the mammæ on the back.

Amongst the earlier observers, the following have seen cases of women with three breasts. Thos. Bartholin<sup>5</sup> relates that he saw a Danish woman with three breasts, the supernumerary one forming a triangle. G. Hannœus wrote, July

Dublin Quar. Journ., Vol. V., p. 266-7.

<sup>4</sup> British Med. Journ., April 28th, 1877, p. 516. <sup>5</sup> Epist. Centurie, IV., p. 218.

<sup>&</sup>lt;sup>2</sup> Journ. de Méd. de Bord., Sept. 1861, and Canstatt's Jahresb., 1861. 3 Nederl. Tijdsch. von Geneesk, and Canstatt's Jahresb., p. 7, 1861.

<sup>&</sup>lt;sup>6</sup> Bartholin's Hist. Cent. IV., ob. 38.

1st, 1675, to Olaüs Borrichius that he made a visit to a lady who had three breasts of a very beautiful form, all giving milk and disposed in the same line. Jean Borel speaks of a woman of Castres, in France, called Rachel Raye, who had three, the supernumerary one being under that of the left side. Blancard<sup>2</sup> and Lanzoni<sup>3</sup> report cases with three breasts. M. Percy saw one of the most beautiful women of Trèves, the mother of three beautiful children, who presented this conformation, and he remarks that Anne Boleyn, who had six fingers, is said to have had six toes, and three breasts. MM. Baudelocque et Coutouly have met with this deformity as cited by M. Percy. Then come those remarkable cases of Jussieu and Robert, which have been already described. More recent observers have recorded the following cases:— August Förster saw one case only, whose supernumerary breast was in the axillary region, and was the seat of carcinoma; the normal breasts were healthy.

Matthews Duncan's saw a case, which he describes under

the title of "Mamma succenturiata."

Dr B. Woodman<sup>7</sup> relates two cases.

Dr Max Bartels' saw this abnormality in a woman 22 years

of age.

There are five or six cases of polymastia besides these, in foreign works or journals, but I was unable to get the originals, or any details about them.

<sup>1</sup> Epist. Centurie, I., ob. 48.

- <sup>2</sup> Collect. Med. Phy., p. 2, ob. 49. <sup>3</sup> Eph. Nat. Cur., An. V., ob. 55.
- Loc. Cit.
- Obstet. Journ., Vol. I., p. 516.

Loc. Cit.

8 Reichert and du Bois-Reymond's Arch. 1875. P. 745.

(To be concluded in our next issue.)