

NOTES ON THE HISTORY OF CAESAREAN SECTION

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As far back as mythological times one can find references to this operation. In the writings of the Egyptians, the Romans (among them Pliny), and the Greeks, it is never mentioned as being performed on the living mother.

As regards the Greeks, the birth of Aesculpius might well have been the first Caesarian Section ever performed. According to legend Caronis, Aesculpius's mother, had betrayed her husband Apollo, who avenged himself by burning her on the funeral pyre, after taking the premature infant from her uterus. Other authorities assert that Aesculpius was born before his mother died of puerperal sepsis, and thus he could not have been possibly born by Caesarean Section, as the Greeks performed this operation only on dead mothers to save the baby for the state.

Regarding the Roman era, it must be noted that it is untrue that Caesar was delivered by Caesarean Section, and therefore the name of this operation did not stem out of this event. The word probably is derived from the "Lex Caesarea", promulgated in Caesar's time, ordering this operation to be performed on dead and dying mothers to save the child for the State.

In the writing of the ancient Hebrews one finds the first record of a Caesarean Section. In the **Talmud** one finds references to babies being delivered through the flanks of dead mothers. Maimonides also, commenting on the **Nidda** is quoted as saying that a woman who cannot deliver vaginally should have the baby delivered abdominally.

According to many authorities the most authentic account of the operation was made only in 1588 by Gaspar Bauhin, who gave an account of an operation performed by Jacob Nufer, a swine sprayer, at Sigerhausen, Switzerland. It is stated that Nufer opened the abdomen and uterus of his primagravid wife while she was still alive. This operation was performed in 1500 A.D. and only recorded 88 years later. Several stonecutters and 13 midwives were in attendance, but none could help her. Nufer seeing that no one could do anything for his wife, went over to the civil authorities and asked permission, which he obtained, to perform a Caesarean Section. He invited all the midwives to see the operation but only two remained as assistants. Nufer extracted the baby from the abdomen through a neat incision which was sutured and healed well. The baby

(who later lived for 77 years) and mother were feeling well within a few days of the operation. Mrs. Nufer later gave birth to twins and four other single births.

In 1540 the first Caesarean Section to be done in Italy on a live mother was recorded by Marcellus Donatus. Operator on this occasion was Christopher Bain. While the mother survived the operation, the baby was born dead. Nine years after this operation, Scipione Mercurio and Dirlewang did much to popularise it in their respective homelands. As regards the French it was Rousset who in 1581 advocated Caesarean Section on living women for the first time in France. Rousset, however, never performed it himself, nor saw it done. Rousset was harshly contested by Pare' who justly remarked against the high mortality rate of the operation.

In the U.S.A. the first Caesarean Section was performed in 1827. John L. Richmond of Newton, Ohio, operated by candle light on a negro woman, using a pocket knife as the operating instrument, and the kitchen table as an operation table. The patient recovered uneventfully within 24 hours. In England the first Caesarean Section on a live woman was done in 1739 by midwife Mary Dunally on Alice O'Neal. It was 149 years after this date that Murdoch Cameron did the first successful Caesarean Section in Scotland.

On our island the first live baby delivered by Caesarean Section performed on a live mother was done on the 28th May 1891 by the then Professor of Obstetrics and Gynaecology, G.B. Schembri. In his memoirs of the operation Profs. Schembri gives an account of the case. The patient, Girolama B. from Naxxar, was a dwarfish primagravida of 35 years. The date of her last menstrual period was on the 25th August 1890. Profs. Schembri having been called on consultation by the patient's doctor, Dr Zammit, early in the morning of the 28th May, examined the patient thoroughly. This is an account of his findings.

".....ventre voluminoso estendendosi in alto fino al processo ensiforme, e pendente in basso fino alle coscie; mizione difficile, pero normali i costituenti dell'urina; oedema alle gambe per ostacolato circolo entro il bacino, polso rapido, sostenuto, tibie arcuate all'infuori (manifestazione rachitica) bacino ristretto; la coniugata di pollici $2\frac{1}{4}$, osteo uterino completamente dilatato; membrana a budello; la presentazione dell bambino era la prima posizione sinistra del vertice OISA, riposante sullo stretto superiore; movimenti attivi del feto distinti come pure i battiti del cuore foetale, specialmente al quadrante inferiore sinistro".

Profs. Schembri ordered the transfer of

the patient to the Central hospital and at 8 p.m. having consulted Drs. Bonnici, Manchè and Tabone, decided in favour of a Caesarean Section. From now on I shall leave it to Profs. Schembri to give us an account of how the operation was performed.

“Il dott. Cassar l'annestizzò,..... feci il primo taglio lungo la linea alba e attraverso tutta la spessore di circa due pollici da pube verso l'ombellico e costeggiando questo a sinistra arrivai a circa due pollici disopra alla cicatrice ombellicale, questa incisione di circa 8 pollici metteva a nudo il peritoneo. Non vi furono rotture di vasi, verso il centro del sacco peritoneale feci una bottoniera e completai il taglio del sacco in alto e in basso col tagliante guidato su di una sonda; l'utero comparve di una tinta rosso bruna, molto attorcigliato sull'asse, talmente che le appendici sinistre uterine comparirono al di sotto del labbro sinistro della incisione e messo in sito e dal Profs. Bonnici mantenuti i bordi della incisione contro l'utero si oviava così all'fuoruscita delle intestine e alla introduzione di corpi eterogenei nel cavo addominale; procedetti allora alla sezione strato per strato delle pareti dell'utero lungo la sua linea mediana per l'estensione di circa 6 pollici evitando il fondo e la porzione sopravaginale del collo. A mezza via di questo taglio si costitui una bottoniera attraverso le quali passai la sonda scanellata prima in basso e poi in alto e sulla stessa completai il taglio ponendo allo scoperto il bambino che era rivotto nel suo sacco e nella posizione diagnosticata, squarciai il sacco ed estrassi per la spalla destra una bambina che era semi-asfittica del peso di 8 libbre e che il dott. Vella fece riavere. ... Suture — sei punti di sutura interrotta di seta sulla parte profonda della incisione uterina e altre quattro superficiali e frapposti. L'utero si sentiva contrarre nel praticare queste suture. Lavato il cavo addominale si rimise l'utero in sito e si passo a nove suture di seta addominali interrotte e profonde e cinque superficiali interposte.”

The patient recovered well except that for a short time she ran temperature of 103°F., but this was down to normal by the 6th day. On the 8th day the sutures were cut off and after 4 weeks the patient was sent back home.

Even as far back as 1802 CSs were done on the island but only on dead women. Up to the first half of the 19th century Caesarean Section mortality was very high and this explains why it was not frequently attempted at this time. This is in contradistinction to the state of affairs in the second half of the same century. The factors that brought about the decrease in the mortality were diverse:— Anaesthesia was introduced in obstetrics by

Simpson in 1847. The problem of infection was tackled on a scientific basis. Obstetricians began to regard Caesarean Section not merely as a last resort before pronouncing the death sentence. Indications of the operation became progressively understood more fully. Techniques were improved.

The extraperitoneal approach was first practised by Von Ritgen in October 1st 1821 on a 37 year old lady, Joan Peter who had suffered for some months from Osteomalacia. However the patient died 3 days postoperatively from haemorrhage. Further reference to such an approach is also found in a letter dated September 28th, 1824 and sent by W.E. Horner to W.D. Dewees; where the former writes about lateral extraperitoneal approach suggested to him by Dr. Physick. T. Gaillard Thomas in 1870 performed unknowingly the operation as Dr. Physick had suggested but never performed on a patient who had died from eclampsia. Further success with this technique was recorded by Skene in 1876, Frank and Sellheim, and Latzko in 1908. Latzko performed his operation on April 26th of 1908 on a primagravida with severe disproportion and in this operation he, for the first time in history, displaced the bladder and peritoneum laterally without separating them as was suggested before by Physick. Cervical hysterectomy was another form of Caesarean Section suggested and performed in the 2nd half of the 19th Century. This was first performed by R. Storer and reported by G.H. Bixby. Both mother and child died postoperatively. Porro met with better luck when on May 21st 1876 he performed in 26 minutes the operation on a 25 year old rachitic, dwarfish, primagravida, Julia Cavallini by name. Both mother and child survived the operation which from then took the name of the distinguished Pavia surgeon. This operation slumped down the mortality rate by full 20%. It was in 1882 that Adolph Kehrer and Sanger developed a new technique to close uterine incisions by sutures, first attempted and given up soon after by Lebas in 1769. Kehrer made his incision low down on the uterus and transversely while Langer made it vertically. Fundal incisions were also suggested by Fritch (1797) and A.P. Muller (1898) but with little success. The lower segment operation was later perfected by Frank (1906) who by his technique rendered the chances of wound infection minimal.

The mortality rate which in the beginning of the 19th Century had been of 50% was cut down to 5% by the end of that century. This percentage fell even more and more in the 1st half of the 20th century as anaesthesia, techniques, the fight against infection etc. became more and more perfected.