PERINATAL LESSONS FROM THE PAST

Ambroise Paré (1510–1590): surgeon and obstetrician of the Renaissance

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Ambroise Paré's life spanned most of the sixteenth century. He was born in a village near Laval in Maine, to a chest maker. After an apprenticeship to a barber-surgeon in Angers from the age of 15, he spent four years (1532–36) as surgical dresser at the Hotel Dieu in Paris. Sylvius was one of his teachers. He qualified as a master barber-surgeon in 1541 and was admitted to the Royal College of Surgeons in 1554, an institution which he was eventually invited to head in 1567.

Paré's very active life was divided from 1536 onwards between campaigning as an army surgeon in France's many wars and practising in his beloved Paris. Distinction came early. Even before qualification he had discovered during the Italian campaign of 1537 that boiling oil was not good for gun shot wounds. As he used to say: 'I dressed him and God healed him'. At that time he also rediscovered the value of the ligature to control haemorrhage during amputation.¹

Paré was a man of the Renaissance and his medical interests were encyclopaedic. Having had no formal university education and knowing little Latin or Greek (for which he was derided by the jealous physicians), he based his knowledge on experience rather than on classical dogma. He was a man of independence and originality, coupled with great power of observation, curiosity, meticulous attention to detail, and an ability to draw broad conclusions from the evidence before him. Fortunately, he also had admirable powers of narration and his many writings were eventually published as a complete works in French in 1575.² Twenty five books deal with subjects as diverse as anatomy, physiology, medicine, surgery, pathology, pharmacy, natural history, infectious disease, obstetrics, and demonology. His original descriptions, discoveries, new techniques, and managements are endless. As a biographer wrote: 'The breadth, insight, force and humanity of his writings, their shrewd humour, his infinite care of trifles, the gentleness and clear-headed sense of his method – they are amazing'. This volume, which went through several editions and was translated into many languages, had a profound influence on European medicine during the following 250 years. The English version from which the extracts that follow are taken was translated by a London apothecary, Thomas Johnson, and published in 1634.

Ambroise Paré, aged 75 in 1585.

These aphorisms of Paré help to illustrate his practical attitude to his craft:

'Hee that would performe any great and notable worke, must diligently apply himselfe to the knowledge of his subject.'

'The Chirurgion must be active, industrious, and well handed, and not trust too much to bookes, be they French, or Latin, or Greek or Hebrew.'

'The operations of Chirurgery are lean't by the eye, and by the touch.'

'Diseases are not to bee cured by eloquence, but by remedies well and duely applied.'

Book 24 of the 'Complete Works' has the title *Of the Generation of Man*. It provides a remarkable insight into sixteenth century obstetrics through Paré's eyes as the following extracts illustrate.

On podalic version and breech extraction:

'Then must the chirurgion, having his nailes closely pared, and his rings (if hee weare any)

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drawne off his fingers, and his armes naked, bare, and well anointed with oyle, gently draw the flappes of the necke of the wombe asunder and then let him put his hand gently into the mouth of the wombe, having first made it gentle and slippery with much oile; and when his hand is in, let him finde out the forme and situation of the childe, whether it be one or two, or whether it be a mole or not. And when he findeth that he commeth naturally, with his head toward the mouth or orifice of the wombe, he must lift him up gently and so turne him that his feet may come forwards, and when he hath brought his feet forwards, he must draw one of them gently out at the necke of the wombe, and then hee must binde it with some broad and soft or silken band a little above the heele with an indifferent slack knot and when he hath so bound it, he must put it up againe into the wombe, then he must put his hand in againe, and find out the other foote, and draw it also out of the wombe, and when it is out of the wombe, let him draw out the other againe whereunto he had before tyed the one end of the band, and when hee hath them both out, let him join them both close together, and so by them by little and little let him draw all the whole body from the wombe. Also other women or midwives may help the endeavour of the chirurgion, by pressing the patients belly with their hands downewards as the infant goeth out: and the woman herselfe by holding her breath and closing her mouth and nostrills, and by driving her breath downewards with great violence, may very much helpe the expulsion. I wish him to put backe the foot into the wombe againe after he hath tyed it, because if that he should permit it to remain in the necke of the wombe, it would hinder the entrance of his hand when he putteth it in to draw out the other ...'

On caessarean section after maternal death

'... If all the signes of death appeare in the woman that lieth in travell, and cannot be delivered, there must then be a chirurgian ready and at hand, which may open her body so soone as shee is dead, whereby the infant may be preserved in safety... You shall often times finde the childe unmoveable, as though hee were dead; but not because he is dead indeed, but by reason that he, being destitute of the accesse of the spirits by the death of the mother, hath contracted a great weaknesse: yet you may know whether hee be dead indeed or not, by handling the artery of the navell, for it will beat and pant if he be alive, otherwise not; but if there be any life yet remaining in him, shortly after he hath taken in the aire, and is recreated with the accesse thereof, he will move all his members, and also all his whole body. In so great a weaknesse or debility of the strength of the childe, the secundine must not bee separated as yet from the childe, by cutting the navell

string, but it must rather be laid close to the region of the belly thereof, that thereby the heat (if there be any jot remaining) may bee stirred up againe ...'

Paré's writings also contain much interest for the paediatrician:

On congenital dislocation of the hip

'There are three general causes of luxations, internal, external and hereditarie ... infants in the very womb may have their joints dislocated by a fall, blow, and compression and by the too much humidity and loosness of the joints: whence also we see many crook legg'd and footed from their nativity ... It also happens to many from their first conformation, that the cavities of their joints are less deprest than they should be and that their verges are more dilated than they should be; whereby it happens that the heads of the bones can the less enter into them. It falls out, that other forms have the ligaments, appointed by nature for fastening together the bones of the joint, whether inserted or placed about, so weak, that from their first original they are not sufficient strength or else abound with much phlem ... so that by their too much slipperiness they less faithfully contain the knittings or articulations of the bones. In all these as the bones are easily dislocated, so they may presently be easily restored without the assistance of a surgeon, as I have sometimes observed in some.'

Paré married twice, first to Jehanne Mazelin, aged 20, in 1541 by whom he had three children and, after her death in 1573, to Jacqueline Rousselot with whom he had six children. Sadly, none of his sons survived infancy. Those who knew Ambroise described him as quiet, gentle, honest and loyal, and one who kept aloof from the intrigues of the day. His religion was the Bible. He loved the countryside and animals and was also fond of good wine. He was a man of compassion who cared for the poor and always strove for peace. Above all, he loved medicine and his country, France.

In 1552 Paré was appointed surgeon to King Henry II and subsequently served all his three royal sons, Francois II, Charles IX, and Henry III. As a Huguenot, he only survived the St Bartholomew's Massacre in 1572 thanks to the personal protection of Charles IX. In 1574 Henry III made him his chief surgeon, valet de chambre and a member of the King's Council, a post he still held in 1587. In 1590, when aged 80, he died peacefully at his home in Paris, famous, well-to-do, loved and much respected, the greatest surgeon and doctor of his time.

1 Paget S. *Ambroise Paré and his times, 1510–1590*. New York: GP Putnam's Sons, 1897.

2 Paré A. *The Workes of that famous chirurgion Ambroise Parey*. Translated by T Johnson. London: T Cotes & R Young, 1634.