

THE NAVEL (UMBILICUS)

(Collated by Michelle Wilkinson www.movingnaturally.co.uk)

After fertilisation, during day 1-3, cell division creates 8 cells which sub-divide into two groups of 4.

One group the embryoblast cells will go on to create the embryo while the other group of trophoblast cells form supporting structures. These structures include the foetal membranes, plus the umbilical cord and placenta which draw in nourishment via blood.

Around 7-10 days there is implantation into the womb (uterus) lining which makes a blood connection between the embryo and mother. This commences the growth of the placenta.

The placenta is a disc of spongy blood-rich tissue 20cm (8inches) in diameter. In some cultures, it is referred to as the twin. Here there is an elaborate network of blood vessels bathed in the mother's blood.

It is between 4-8 weeks that the rope-like structure of the umbilical cord is formed. It measures 60cm (24inches) long and connected to the placenta means there is no direct contact with the maternal circulatory system.

Oxygenated and nutrient-rich blood flows from the placenta into the umbilical vein towards the foetal liver. Some of this blood branches to the liver whilst the rest is redirected by the ductus venosus into the right atrium of the heart via the inferior vena cava. From here it either travels down into the right ventricle or directly through to the other side of the heart into the left atrium via a hole called the foramen ovale. Then the blood passes into the left ventricle before arriving in the aorta.

Almost all the well-oxygenated blood that enters the right side of the heart has avoided the pulmonary circulation. The lungs are deflated and only inflate on birth with the first breath of air. It is at this stage that the foramen ovale between the left and right side of the heart closes.

In a natural childbirth the umbilical cord is not cut until the new-born has clearly demonstrated functional lung breathing.

The final stage of labour begins as soon as the baby has been born and lasts until the placenta (afterbirth) is delivered following the umbilical cord out of the vagina. This usually takes 5-30minutes.

In Traditional Chinese Medicine (TCM) the Conception Vessel (CV) or Ren Mai runs down the frontal midline directly through the navel. The Penetrating Vessel (PV) or Chong Mai lies half a thumb width either side of the CV, but also continues down the inside of the legs to the large toe. This vessel is complex with many functions and names. Both the PV and CV are concerned with receptive yin qualities such as self-nourishment; the ability to discover the internal mother.

The Penetrating Vessel under one of its names 'Sea of Blood' is concerned with blood flow and bloodline. For the foetus in the womb, it is through the navel that the blood flows to and from the mother.

The CV8 acupressure point can be found directly in the centre of the navel. It is called Spirits Palace Gate. It strengthens the spleen and the body's yang. It is beneficial for extreme fatigue, internal cold and chronic diarrhoea.