

BAO ZHONG OR PRIMORDIAL KIDNEY

The Chinese Classics tell us that *du mai*, *ren mai* and *chong mai* arise from a common source: *Bao Zhong*. In literature it becomes clear that there are problems in translating this concept. Therefore the question is what exactly is meant by this concept. Usually *bao zhong* is translated as ‘uterus’ or as ‘palace of *jing*’. This article intends to show that *bao zhong* is related to the primordial kidney and to the urogenital system arising from it. Also the concept ‘uterus’ needs to be interpreted in a wider sense and not merely as the physical structure of the uterus.

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Preface

The idea that *ren mai*, *du mai* and *chong mai* have their origin in one common principle, 胞中 *bao zhong*, is found for the first time in *huang di nei jing*, an old Chinese medical text, considered to be the basis of Chinese Medicine. Li Shi-zhen, one of the most famous doctors in Chinese history, recently translated by Chace and Shima^{1,2}, writes that both *ren mai*, *du mai* and *chong mai* originate in *bao zhong*. Chace and Shima translate *bao zhong* as ‘gestational membranes’! Also in translations from *huang di nei jing* there is an inconsistency considering the concept *bao zhong*. Henry C. Lu uses terminology like ‘from inside the womb’³, ‘in the womb’⁴, ‘the internal region of the womb’⁵. Wu Linsheng and Wu Qi speak about ‘bladder’⁶ or ‘uterus’⁷. Wiseman & Feng do not mention ‘*bao zhong*’ in their Practical Dictionary⁸. They do explain other terms like 胞絡 *bao luo* (uterine network vessels) and 胞脈 *bao mai* (uterine vessels). Also Paul U. Unschuld does not mention in his dictionary of the *nei jing*⁹ the concept of *bao zhong*.

Bao Zhong and Dan Tian

In the *yi zong jin jian*¹⁰, a book that covers all aspects of Chinese Medicine from the ‘Spring and Autumn’ period (770-476 B.C.) until the *Qing*-Dynasty (1644-1912), it is stated that *bao* is the same as *dan tian*, uterus and ‘palace of *jing*’: “the *du mai* arises within the lower abdomen, externally in the abdomen, internally in the *bao*, also called *dan tian* in both men and women: in women it is the uterus, in men it is the room of sperm”¹¹.

This quote shows that the structure ‘*bao*’ exists both in men and in women. In women it refers to the uterus, in men it refers to the ‘palace of *jing*’ (精宮 *jing gong*).

Dan tian or the lower Cinnabar Field is a term coming from Daoism. *Dan tian* is usually located three fingers below the navel and then two fingers deep, indeed right there where in women the uterus is located.

Bao Zhong and Uterus

In *huang di nei jing su wen*¹² *bao zhong* is clearly represented as uterus. When explaining the meaning of *bao mai* it is written: “Suppression of menstruation is due to a blockage of *bao mai* which belongs to the heart and is linked with *bao zhong*”. With *bao zhong* one clearly means the uterus here, since it is about a missing menses.

According to RoCHAT de la Vallée, *bao zhong* in this quote is not exactly the same as ‘uterus’. She translates it as “the centre of the origin of life”, from where the *qi jing ba mai* that organise life, originate and issue¹³. So this is a far broader concept than merely ‘uterus’.

Bao Zhong and Ming Men

Bao zhong is also often compared to *ming men* or ‘the moving qi between the kidneys’. The fact that there is no consensus about *ming men* becomes clear when looking at the Practical Dictionary of Wiseman & Feng¹⁴. They describe 6 different theories about *ming men* or life-gate: a) both kidneys contain the life-gate; b) the space between the kidneys is the life-gate; c) the life-gate is the stirring *qi* between the kidneys; d) the life gate is the root of original *qi* and the house of fire and water; e) the life gate is the fire of earlier heaven or the true *yang* of the whole body; f) the life-gate is the gate of birth, i.e., in women the birth gate and in men the essence gate.

In *nan jing*¹⁵ we read: “It is like this. The two kidneys are not both kidneys. The one on the left is the kidney; the one on the right is the gate of life (*ming men*). The gate of life is the place where the spirit-essence (*shen jing*) lodges; it is the place to which the original influences (原氣 *yuan qi*) are tied; Hence in males it stores the essence (*jing*); in females it holds the womb (*bao*). Hence one knows that there is only one kidney.”

In another chapter of *nan jing*¹⁶ we find the same quote again, but with an additional statement: “The influences of the gate of life are identical with (those of) the kidney”. In this context both the uterus and the ‘palace of jing’ are called *ming men* while in the previous subsection ‘Bao Zhong and Dan Tian’ it explains that both uterus and ‘palace of jing’ are represented by the term *bao zhong*. Thus there appears to be a similarity in meaning between *bao zhong* and *ming men*.

The *nan jing*¹⁷ further asserts: “the influences moving below the navel and between the kidneys constitute man’s life. They are the source and the basis of the twelve conduits. Zhang Jing Yue notes in *Lei Jing*¹⁸, an analysis of the *nei jing*, that: “The fire of *ming men* is called *yuan qi*; the water of *ming men* is called *yuan jing*”. This confirms to us that *yuan qi* and *yuan jing* do not belong to the kidney but to *ming men*.”

He also states: “*Ming men* is localised within the kidneys and without *ming men* the *yin qi* of the five *zang* cannot be nourished, nor can the *yang qi* of the five *zang* rise”^{19,20}.

This demonstrates that life and its activity are really dependant on *ming men* and the moving *qi* between the kidneys. Without well functioning *zang*, life is impossible.

What is Bao Zhong

The afore- mentioned citations make clear that in Chinese Medicine there is no consensus about the name of ‘the origin of life’ within the human body.

It is clear however that this is the place where the *qi jing ba mai* have their origin.

It appears that the terms uterus, *jing gong*, *bao zhong*, *ming men* and *dan tian* are used at random, creating confusion. *Nei jing* refers to *bao zhong*, Daoists speak about *dan tian*, and according to the *nan jing* it is all about *ming men*!

The most common translation for *bao zhong* is ‘uterus’ for women and ‘palace of jing’ for men. The uterus is a muscle. The ‘palace of jing’ also seems easy to interpret, consisting of testes and epididymes.

The testes are the gonads (genital glands) of a man. The epididymis mainly serves as a reservoir. In the early embryonic stage both uterus and testes are located in the abdominal cavity. The descent to the scrotum starts around the second month of pregnancy and is usually completed around the moment of birth.

It seems remarkable that the origin of life and of three important meridians, the *chong mai*, *ren mai* and *du mai* would arise from a muscle, the uterus, in a woman and in a man would

arise from two glands, the testes, in a man. Don't you think the interpretation of *bao zhong* in both men and women at least have to be homologous?

In order to clarify the situation one can look at the embryogenesis from a western point of view. It might well be argued that eastern and western medicine are based on different understandings but whilst the perspective is different, the human body that is the object of study is the same. That is why I have chosen to integrate western embryogenesis with eastern insights to make a match with the concept of *bao zhong*.

The framework

Elisabeth Rochat de la Vallee²¹ asserts that the *qi jing ba mai* form a basic framework when the human body begins to materialise.

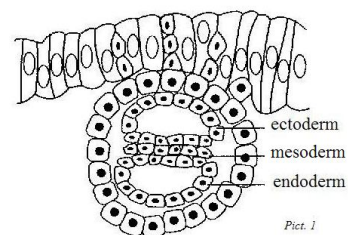
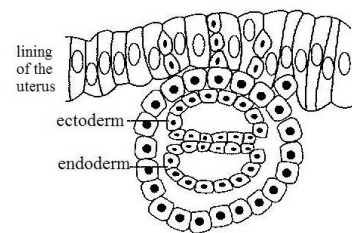
In this process the *du mai* is responsible for a first presentation of *qi* and *yang* in the body, while the *ren mai* is responsible for the first structuring of *xue*, *yin* and *jin ye*. The *chong mai* takes care of *is taking care of* a harmonious junction of the opposition between *ren* and *du mai*, through the sea of blood²², the sea of the twelve meridians²³ and the sea of the five zang and the six *fu*²⁴.

ren mai	↔	du mai
yin	chong mai	yang
xue	↔	qi

An analogy with the three germ layers as described in the embryogenesis in western medicine suggests itself here. After a fertilised egg successfully develops from zygote via morula to blastula, an implantation in the endometrium will take place. First the ectoderm and endoderm come into existence and subsequently the mesoderm. (Pict. 1).

The ectoderm is the exterior (yang) germ layer, which could be the *du mai* in the first instance. The endoderm is the second in the sequence, the inner (yin) germ layer, the *ren mai*. Finally, following this way of thinking, the mesoderm, the middle germ layer, could fairly be described as the *chong mai*.

ectoderm	du mai
mesoderm	chong mai
endoderm	ren mai



Pict. 1

The Mesoderm

The mesoderm develops from the 13th day of pregnancy. From this mesoderm develops the urogenital system. Before the final kidney or meta-nephros comes into existence two temporary kidneys are formed after each other. The pro-nephros is the most basic excretory organ and corresponds to the first stage of kidney development. It is succeeded by the meso-nephros or **primordial kidney**. The final kidneys evolve indirectly out of the primordial kidney, in the 5th week of pregnancy from the distal Wolffian ducts, a pair of tubes that carry urine from the primitive kidneys to the primitive bladder (see below).

The primitive gonads, from which the ovaria and testes come into existence later on, develop along the ventromediale border of this primordial kidney. In this embryonic stage there is a clear relationship between the gonads and the kidneys.

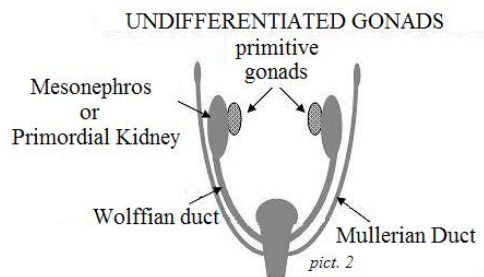
During the first eight weeks of development of the foetus the gonads are still undifferentiated, which means they are the same for both man and woman. In both there is a development of the Mullerian ducts and the Wolffian ducts.

The Wolffian ducts are the outlet ditch from the primordial kidney to the sinus urogenitalis.

The Mullerian ducts develop alongside the

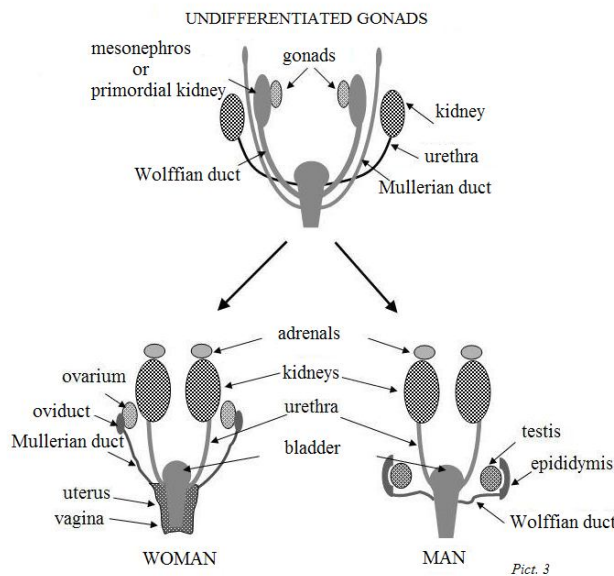
Wolffian ducts and grow under guidance of the latter until the genital tubercle.

When the foetus is eight weeks old, the urogenital system exists of the primitive gonads, the mesonephros or primordial kidney and two pairs of tubes: the *Mesonephrogenic* primordial kidney Wolffian ducts and the *Para-mesonephrogenic* Mullerian ducts.



Due to the 'anti-Mullerian hormone' in the eight week of pregnancy the Mullerian ducts start disappearing in the male embryo and the Wolffian ducts continue developing into the ductus epididymidis, the ductus deferens, the vesicula seminalis en the ductus ejaculatorius.

In the female embryo, the Wolffian ducts almost completely disappear and from the Mullerian ducts the tubae falopii (oviducts) develop. The distal parts of the Mullerian ducts merge and the uterus and the upper part of the vagina develop from this. (Pict. 3)



Conclusion

It becomes clear that when translating *bao zhong* in men as 'palace of jing', the female equivalent should be ovary instead of uterus. The reason for this is that testis and ovary are both functionally and embryonically much more similar than testis and uterus, since both of them are developed from the primordial kidney.

The primordial kidney would then be the place where in Chinese medicine *yuan jing* is stored, which develops into kidney-*jing* as ovum and spermatozoid. Since the *qi jing ba mai* also distribute kidney-*jing* it is fairly plausible that the

primordial kidney is also the origin of the *qi jing ba mai*.

When the foetus has fully developed and one has a look at the schematic representation of the urogenital system (Pict.3) then two things become clear.

Firstly that it is the kidneys that nourish the whole system.

Secondly that all structures meet at the place that we call 'uterus' in women.

This might be the reason that '*bao*' is usually translated as 'uterus'.

From this article I hope it becomes clear that that the concept 'uterus' then needs to be interpreted much more broadly than merely as a muscle; it is the centre of the urogenital system and in keeping with that the centre of 'the origin of life'. Every part of this system in

the end has its origin in the primordial kidney. And (as Aristotle said) ‘the whole is more than the sum of its parts’, namely the real origin of life!

Finally

Acupuncture points with names referring to an action in the area of *bao zhong* are:

jing gong (palace of *jing*): GV-4 en BL-52;

dan tian (lower cinnabar field): CV-4, CV-5 en CV-7;

ming men (gate of life): GV-5, CV-4, CV-5;

bao men (gate of *bao*): CV-4 en KI-13

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Noten

1. Chapter 9 in *An exposition on the Eight Extraordinary Vessels* (Chace and Shima, 2010); Originally: *qi jing baa mi kao*
2. Chapter 13 in *An exposition on the Eight Extraordinary Vessels* (Chace and Shima, 2010); Originally: *qi jing baa mi kao*
3. *A complete translation of the yellow emperor's classic of internal medicine and the difficult classic*, by Henry C. Lu, Ling shu 65-27
4. idem: Ling shu 57-6
5. idem: Su wen 33-29
6. *Yellow Emperor's canon of Internal Medicine*: Ling shu 65
7. idem: Su wen 33
8. *A Practical Dictionary of Chinese Medicine*, door Wisemann & Feng, 1998
9. *A Dictionary of the Huang Di Nei Jing Su Wen*, by Hermann Tessenow and Paul U. Unschuld, 2008
10. The golden mirror of medicine (*yi zong jin jian* 醫宗金鑑, 742). Written by Wu Qian a.o. for the government of the Qing dynasty.
11. Translation by Maciocia in *Obstetrics & Gynecology in Chinese Medicine*
12. *Huang di nei jing su wen* chapter 33
13. *The extraordinary fu*, by Elisabeth Rochat de la Vallee
14. *A Practical Dictionary of Chinese Medicine*, by Wisemann & Feng, 1998
15. Chapter 36, *Nan jing, the classic of difficulties*, by Paul.U Unschuld.
16. Chapter 39, *Nan jing, the classic of difficulties*, by Paul.U Unschuld.
17. Chapter 66, *Nan jing, the classic of difficulties*, by Paul.U Unschuld.
18. *Lei Jing* (an analysis of the *nei jing*) by Zhang jing yue
19. *Lei Jing* (an analysis of the *nei jing*) by Zhang jing yue
20. *Jing Yue Quan Shu* (Jing Yue's complete works), by Zhang jing yue
21. *The Eight Extraordinary Meridians*, by Elisabeth Rochat de la Vallee
22. *Huang di nei jing ling shu 33*
23. *Huang di nei jing ling shu 38 and 62 and huang di nei jing su wen 44*
24. *Huang di nei jing su wen 44*