

The Treatment of Infertility with Chinese and Western Medicine: A Discussion

Abstract

In late Spring 2012 a group of Chinese and Western medical experts in the treatment of infertility came together in Zurich. The meeting was the result of their collaboration on a forthcoming textbook on the treatment of infertility with Chinese medicine. The primary author, Professor Yuning Wu - one of the most eminent fertility specialists and gynaecologists working in China - is the chief doctor and professor of integrated Chinese and Western medicine at the Beijing Hospital of Traditional Chinese Medicine. The other authors are Michael Haeberle, a reproductive endocrinologist, and Celine Leonard and Esther Denz, both senior students of Professor Wu and clinicians specialising in the Chinese medical treatment of infertility. Finally, Inga Heese, a Chinese medicine practitioner working extensively with infertility, and Peter Deadman, co-editor of the *Journal of Chinese Medicine* - both editors of the forthcoming book - were on hand to ask questions and engage in the discussion.

IH: How do you [Michael and Esther] work together to integrate Western medicine and Chinese medicine? This model doesn't really happen very often in Europe.

MH: While I am a Western medicine specialist in infertility I believe that if you look at a problem from different angles you get a better view. Western medicine has its point of view and Chinese medicine has its point of view but when you combine them you get better results. This has been proven by rigorous Western medical studies¹ - that is the reason we - that is my clinic - became interested in working in this way.

PD: Tell us briefly what that study was about?

MH: The study was about acupuncture at the point of embryo transfer during IVF.

ED: I had been specialising in gynaecology and infertility here in Zurich when I met Michael in 2001. We started referring patients to each other. A lot of patients who came to me for Chinese medicine didn't want to go to Western medicine, but actually needed Western medical diagnosis like blood tests or sperm tests. And Michael's clinic would send me their cases of unexplained infertility.

MH: Yes, in Western medicine we have a lot of conditions where we prefer to do nothing - just wait. What we discovered was that although these problems - such as unexplained infertility, primary dysmenorrhoea, hypermenorrhoea - were functional,

if the patients were treated with Chinese medicine they did better. And of course what is unexplained cannot be treated but clearly there must be something going on that Western medicine cannot recognise, and that is the reason why we began to look at Chinese medicine.

ED: There is a wonderful open-mindedness at Michael's clinic that you don't find in many other places.

PD: It is understandable that you would start with this category of patients - those for whom nothing can be done in Western medicine and for whom Chinese medicine offers an option. But have you moved onwards from that in the sense that you now refer patients who have known disorders that you now recognise Chinese medicine can treat?

MH: Of course. We now have the experience that many patients can benefit from Chinese medicine, especially in cases of endometriosis, or menstrual cycle disorders, bleeding disorders etc. For example, in Western medicine we don't particularly care if there are clots in the period, but actually it seems patients do better if they don't have clots.

ED: ... and if they have a normal bleed. No woman feels right when their bleeding is very scanty - they know this can't be right. Scanty periods always have implications ...

YW: Of course! If you don't treat these patients their period will become less and less. In Chinese medicine

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Keywords: Chinese medicine, fertility, infertility, integrated, Chinese herbal medicine, acupuncture, IVF, ART

that is Liver blood deficiency or Kidney yin deficiency. Eventually these patients will have low ovarian reserve, and treating their scanty periods in time is a form of prevention. A lot of patients don't notice their period getting less and less - they only go to the doctor when they have no period, and when the doctor checks they find they have very high FSH [follicle stimulating hormone]; but if you get that kind of information early enough you can do something about it. In Chinese medicine we can look at the tongue and pulse and other symptoms to really see what is going on.

ED: And Western medicine cannot do anything if a patient has a thin endometrium. In fact some of the drug treatments - mainly Clomid - make the endometrium even thinner. We get very good results with thin lining and Chinese medicine.

CL: But just to come back to the core theme here. The resources of the body are expressed in the menstrual cycle - that is, the menstrual cycle gives us feedback on what is going on in the body - gives us a wonderful understanding of the hormonal flow of the patient. This is how the two systems of medicine can really work together.

One of the main things you have to do as a doctor is to educate your patients. Educate them to have their children young - before 30.

PD: So basically you are dealing with two systems of medicine that are blind to certain aspects of diseases: Chinese medicine has traditionally been blind to all the laboratory and medical tests you can do now so they didn't have that kind of information; and Western medicine is blind in so far as it hasn't got a tradition of paying attention to symptomatology which it doesn't think is materially relevant, despite Chinese medicine's understanding - as well as growing evidence - that it is relevant, like the quality of the bleeding for example.

ED: And that is the beauty of working together: drugs like Clomid can be used but you can give herbs or acupuncture alongside so you don't get the negative side-effects such as the heat signs that are so common with Clomid ...

YW: Yes, Western medicine is good at promoting ovulation, and Chinese medicine is good at supporting good quality blood and jing, and to prevent thinning of the endometrium. Chinese medicine can also help the follicle to rupture properly - this is very important when the patient is taking Clomid because it can cause luteinising unruptured follicle syndrome where the follicle does not rupture successfully.

MH: I have another example of how the two systems combine well. I have a lot of couples where the man has a low sperm count so they are referred for in vitro fertilisation - which always has side effects for the female partner. One of the more successful treatment strategies, the long protocol, involves more medication - and thus more side effects. Chinese medicine can help greatly to reduce those side effects, or even make them disappear.

ED: Yes, when we did our in-house research, we found that not only were patients getting better pregnancy rates by combining both therapies, but also they experienced much fewer side-effects. Their quality of life during those seven weeks of treatment was much better!

CL: We also find that if you treat both partners they do much better in their ART cycle.

PD: So if the man has problems with sperm parameters, you would treat the man too?

YW: Yes, sometimes. Often we have to refer them on to a TCM andrologist as we do not have the capacity to see too many male patients. We are too busy already.

ED: We do in our clinic but not so many men like to come. We generally prescribe herbs and do less acupuncture.

MH: The problem with male infertility in Western medicine is that there is no proven medical treatment. You can improve motility, morphology, count, but no medical treatment has proved effective at improving actual pregnancy rates.

PD: It's the same with Chinese medicine. Acupuncture has proven effective in improving those parameters, but as far as I know no-one has done a study on take-home baby numbers.

IH: But just as an increase in menstrual blood flow improves fertility rates in women, improved numbers of sperm in men with better morphology and motility should increase their fertility.

CL: I have observed that even if the sperm parameters don't change hugely through treatment, any subsequent ART is more successful: both fertilisation rates and pregnancy rates improve.

MH: I am very pessimistic about male fertility in the future because it has been decreasing very quickly over the years. Pollution and nutrition are probable causes, but genetics also play a role. The Y-chromosome is the only chromosome in humans that is not double. All other chromosomes are pairs. From one generation to the next

these chromosomes divide and reconstruct during meiosis. If there is a mistake in one chromosome then the other pair can help and construct itself correctly- it is a biological fall-back mechanism. All chromosomes can do that except the Y-chromosome, which only has 180 genes. All other chromosomes have between 5000 and 40,000 genes. The Y-chromosome has lost all the other genes in the last two to three million years. And the more humanity advances the more genes will be lost from the Y-chromosome – until one day it will completely disappear. Sperm production is the only human function that is located on only one chromosome.

[Silence]

PD: Doomsday! [All laugh]

MH: Other species face the same problem. What will probably happen is that sperm production will move to another chromosome ... but anyhow, speaking way into the future, in maybe one or two million years the Y-chromosome will have disappeared. But to come back to modern day, this highlights the problem with the Y chromosome: it is highly vulnerable if exposed to a toxic environment.

PD: Yes, male fertility is declining so rapidly that there must be environmental factors that play a role. For example the Aberdeen study,² which showed a 29 per cent drop in a 12-year period.

MH: Yes, that is why I am pessimistic about treatments for male infertility and their effectiveness. There is no evidence-based study that has proven any effectiveness in treating male infertility successfully. That is why we do ICSI [intra-cytoplasmic sperm injection], where you only need one sperm per egg, rather than thousands or millions.

PD: And we could probably spend all afternoon discussing the consequences of bypassing millions of years of evolution ...

MH: ICSI is a possible treatment for the problem we face; whether it is good or bad I don't know.

ED: But what we can say for sure is that we can support the female partner through fertility treatment and optimise everything for them so that there is more chance of the ART working.

PD: Yes, even in natural conception, healthier cervical mucus can support the sperm better.

ED: And I do think that the treatment of male infertility

has a place in Chinese medicine too.

IH: Dr Wu, what is your perception about male infertility and Chinese medicine?

YW: It is very good! Of course you will have better pregnancy rates with improved sperm parameters.

MH: A big problem in Europe is that the age of the women who want to conceive is getting older and older.

YW: Yes - also in China in the cities. Everyone wants to have a career first. Women want to be working.

MH: Can traditional Chinese medicine enhance fertility in the older woman?

YW: One of the main things you have to do as a doctor is to educate your patients. Educate them to have their children young - before 30. We tell them 'You can have your career when you are 50 or 60, but not children ...'

MH: And do they listen to you?

YW: Some of them. Some have regrets and say: 'If I had known you earlier I would have my own children now'. When they are older, they spend all their money and strength on getting pregnant, and it is still difficult.

PD: Basically you tell them that if they know they want a baby, its baby first, career afterwards.

YW: Not really like that! We also had a career whilst we had children. But nowadays people want too many things: they want to have money, have things, have a career and only then do they think of children. And then it is really difficult.

IH: So what can you offer your patients when they are 38 or older and come to you for help?

YW: From 38 onwards we always do combined treatment, Western and Chinese medicine together. Otherwise there is not enough time.

ED: I think this is one of the crucial factors that not everyone understands: once a woman is over 38, you must combine the treatments. You cannot, for instance, rely on yin tonification alone and waste six precious months with it. There is just not the time for it. You need to work in parallel. Or at least check everything out; if everything is good you can maybe afford just to try with Chinese medicine for six months.

CL: This is why it is so important to have a good

relationship with other professionals, and be in dialogue.

YW: In China all TCM practitioners learn a lot of Western medicine, so they have an awareness of both sides. This is why we teach so much Western medicine here to European students.

MH: But integration is always very difficult.

YW: Even in China there has been reluctance among Western reproductive gynaecologists to refer patients for Chinese medicine. But it is getting more common for them to refer their difficult patients. They try everything they can with all possible drugs for their patients, but if they still have a thin endometrium, what can they do? They say 'You'd better go and see Dr. Wu', and after seeing me the patient gets a good result, so they are now referring more patients. The director of the Third Teaching Hospital sends patients now: when patients repeatedly fail to get pregnant after embryo transfer, they say 'Go and see Dr Wu and come back in two or three months time', and then it works. Also now in China when patients have repeated failures after good quality embryos are transferred they check the blood flow to the endometrium with a Doppler ultrasound, and often find it is very reduced. I had a very interesting case once where a patient with repeated implantation failure had purple spots on her tongue and the whole tongue looked dark; I said to her 'You have blood stasis, which must mean you have poor blood circulation in your uterus'. She told her fertility doctor and the doctor laughed and didn't believe it, but did an ultrasound scan anyway and he said 'Oh my god there is no blood flow!' So you see Chinese medicine can inform Western medicine, not just the other way around.

PD: But I have heard you say that sometimes there can be blood stasis in a patient even though there are no obvious signs or symptoms of it.

YW: Yes that is why we also need the Western medicine diagnosis.

ED: Or the signs and symptoms are very few and less obvious, such as scanty bleeding, or no bleeding.

YW: We had an interesting patient once - 40 years old with four failed IVF cycles - where there was very reduced blood flow. After Chinese medicine treatment she became pregnant naturally - it was only the reduced blood flow that made her infertile.

MH: Dr Wu, until what age do you think these treatments are possible and beneficial for getting pregnant? 41, 42, 45?

YW: After 40 it gets difficult, but we never say no. We always try to help. My oldest patient was 48! As long as

they have a good cycle, and their FSH is not too high it is possible. You always have to try. Some women may have lost their baby or child to an illness or a car accident - how can you not try? If it doesn't result in a pregnancy there is no harm in treating them. Chinese medicine improves their health anyway. If they get a baby great, if they don't, we have already told them it will be difficult.

MH: You are talking about a natural pregnancy aren't you?? Because using IVF we will have already told them it is nearly impossible because we have a live birth rate of less than one per cent in 43 year olds. So it is not really useful to do IVF after 43. But I always think that because in IVF you remove the eggs, do the fertilisation, keep them in a petri dish and incubator - there is so much external stress, this is one reason why it doesn't work very well.

YW: Of course, maybe you even damage them a little bit ...

MH: Exactly. But you are trying to help them get pregnant naturally.

YW: Yes, we try to make sure the tubes are open, improve the ovarian function and make them generally much healthier. For example no IVF clinic wanted to continue to treat a 44-year-old woman because her FSH was 24 - too high. They told her there were no eggs. After some months of Chinese medicine she did another IVF and got one egg and the embryo developed to 10 cells and they did an embryo transfer. She got pregnant, but unfortunately miscarried.

ED: In our clinic when they are older than 43 we do Chinese medicine only.

MH: Western medicine has no answer to the problem of ovarian aging. One solution is egg preservation. We offer this to young women - take the eggs out and cryopreserve them for later. We do this a lot now: some women have cancer, some women have no partner yet, some women are not ready to have children. From the traditional point of view is it good to freeze eggs?

[Silence]

YW: Who is to say? But from the Chinese medicine point of view natural is always best, for who knows what the long-term consequences are? The deformities may come out in 100 years time or so. So it should only be done in exceptional cases.

PD: I have two questions here: Dr Wu, the principle you follow is always nature first, intervention second?

YW: Yes of course. However under 'natural' I include conception with Chinese medicine, as well as some drugs or IUI [intra-uterine insemination] - just not IVF.

PD: Michael, would you hold the same position?

MH: In Western medicine one should also aim for natural conception. But it is not always possible.

PD: It is becoming evident that babies born with ART have slightly higher rates of developmental problems, and babies born by ICSI from infertile men have a lower fertility rate themselves. So my second question is: from the Chinese medicine perspective do you worry that ART is diminishing the jing of future generations?

YW: I don't really worry about things that will happen in the future. However, no doubt it is better if the woman is young and there is much more blood and jing around. It is also much better for the woman's pregnancy! And of course it is OK to do IVF if the sperm is insufficient - how can we not help those couples? However the problem is that many couples now try to conceive only for a short period and then want to do IVF. They come too quickly. They don't give nature a chance. For example women with endometriosis. Chinese medicine can give them such a good treatment! And IVF doesn't really give them so much more of an additional benefit, unless of course the tubes are blocked. So many patients with endometriosis think IVF is their solution, but I don't think it is, what do you think, Michael?

MH: I completely agree. I think IVF is a good treatment for impatience!

CL: A lot of women, once they are 37, are rushed into IVF. It is not just impatience on their side - it is the medical direction when you are older.

YW: It should depend both on the age of the patient and how long they have been trying to conceive. Only then should they be referred for IVF.

PD: Michael do you worry about the effect that IVF will have on future generations?

MH: Of course I worry about that. Are we creating human beings with future health risk or diseases? We have a problem here of many 40 to 45 year old women going abroad for egg donation and they come back pregnant with twins or triplets or quadruplets. And that is a big problem, because if you are 45 and pregnant with twins there are going to be major health implications. It is a big ethical question. There is a large study from Switzerland that just came out showing that IVF babies are born with

stiffer arteries, predisposing them as adults to a 30 per cent greater risk of high blood pressure and heart attacks. What is uncomfortable about this is that we do not know how this risk is mediated; is it the culture media that is used to cultivate the embryos? Is it a localised problem or would it be the same all over the world? In the next two years more studies should come out about the same topic because it is a study that is easy to repeat and simple to measure. We already had studies suggesting chromosomal abnormalities, but this is new evidence, not genetic problems, but epigenetic problems.³

Even when a doctor tells a woman that they have good eggs and they look good on the ultrasound, we might find they have a weak Kidney pulse and not enough Liver blood and Kidney jing to support all those follicles.

IH: Michael, do you find it hard hearing news like this?

MH: No, all new information can help us improve our skills. When this study came out lots of our patients - parents of IVF children - phoned us. Once you speak to them they calm down and you tell them to take their kids to a cardio-vascular specialist when they are 10 to see if they have any problem. Now we have to inform prospective patients of that risk factor, but I don't think it will stop anyone doing IVF. We already tell men with low sperm count that if they have sons they have a higher risk of low sperm counts too. The decision for IVF is an emotional decision, not necessarily a rational one.

PD: Is that the reason why you are interested in Chinese medicine - doing whatever you can to enhance natural conception?

MH: Yes. If a couple can get pregnant naturally it is much better than doing external fertilisation.

PD: A lot of modern Chinese medicine practitioners are making a good living out of IVF support, and may not question its role. However, from the traditional Chinese medical point of view IVF could be seen to have a damaging effect on the health of future generations of children. I do think it is an ethical problem. However, not many practitioners can look a desperate woman in the eye and refuse to treat her. But I think from our point of view we must make sure that everything possible is done to enhance natural conception.

YW: Another really important issue is that even when a doctor tells a woman that they have good eggs and they look good on the ultrasound, we might find they have

a weak Kidney pulse and not enough Liver blood and Kidney jing to support all those follicles. There may be enough to support one or two follicles but if 14 follicles or so have to share that how can the woman get pregnant? So the quality of the future pregnancy is in question; of course for this patient it would be better to conceive naturally.

IH: Some studies⁴ suggest that Chinese herbs can affect the mitochondria of the egg cells - the energy production - which the egg and then the embryo rely on to get through the first few days of life, which would, without treatment, result in poor embryo development or even arrest.

YW: Yes those patients don't even get to the stage of embryo transfer. Or they will have a miscarriage. Or the baby will have poor health. All because there wasn't the necessary jing in the first place, or else it had to be divided amongst too many follicles. It is not always the more the better.

IH: This is where low stimulation IVF comes in, which may be more suitable for certain patients.

MH: This is important. In Europe we now aim to produce between eight and 12 eggs, which gives you a cumulative pregnancy rate of about 60 to 70 per cent – this is based on all embryos from that one IVF cycle being transferred or frozen to be used later.

IH: So Michael have you actually seen that the more eggs and embryos there are the more the quality of those embryos go down?

MH: The quality diminishes a little bit - not much.

IH: So if you see a decrease in quality when you push for many eggs this matches with the Chinese medicine viewpoint - that you are potentially weakening the jing.

CL: Not necessarily. I have seen studies where they try to establish if there are any long-term health risks from IVF, for example earlier menopause, and they have not found a link. Maybe there is a difference how Chinese medicine and Western medicine see the resources for the eggs?

MH: Yes. In Western medicine the number of eggs you induce doesn't influence at all the age of a woman's menopause, because at the beginning of each cycle many eggs are produced, and if only one grows the others die anyway.

IH: But maybe the extra energy that we talk about in Chinese medicine goes into the growth of all those follicles - that is what may require a lot of jing.

MH: But in Western medicine it is the numbers that count. If you count the original pool of follicles and 10 die naturally or are used during IVF, for us it is the same. Menopause is not earlier because you have done 10 IVFs. That is for sure.

YW: Then why doesn't the period come back after doing IVF in lots of patients where before it has been totally regular. I personally don't believe that IVF doesn't do any damage.

MH: I have only noticed amenorrhea for a few months with long down-regulation amongst patients with endometriosis.

IH: It is commonly seen in our patients, mainly those with low ovarian reserve. I always ask my patients who are older or have low ovarian reserve who have had several IVFs how long it took for their period to come back. If they say immediately, it is a good sign. If they say two to three months I know their ovaries are struggling.

YW: The problem is that the patient was OK before with a regular cycle. But now, after the procedure, they have no period. Because you squeeze all the eggs out, including the future eggs. Then they have to rest.

MH: We don't have those patients.

CL: This is where there is a lack of communication between Chinese medicine and Western medicine. And this is where they differ.

YW: So how much time do you leave between two fresh IVF cycles?

MH: At least two months of regular cycle.

YW: We leave at least two months, depending on the patient's pulse and tongue. If the patient is very weak, better wait longer. If the tongue shows damp-heat or blood stasis, that means they have a pathogenic factor, and how can IVF then work?

ED: That's what we do also. Most patients wait four months.

IH: In England some clinics do one IVF after another without any break, only one bleed in between, while others insist on at least three months break.

PD: Is the fact that a lot of this discussion is about IVF and assisted reproduction reflective of what happens in your clinics? How many of your patients are undergoing ART?

CL, MH and ED: Probably fifty per cent.

YW: Fifty per cent? That is too much! You must try to encourage natural conception! In my clinic perhaps ten per cent undergo ART.

IH: Many of our patients also come for IVF support.

PD: But isn't this an interesting rough statistic - either the patient group is very different, or ...

ED: I think it is because the patients in Europe are older. What is the average age of my patient - thirty-eight? How about in your clinic Dr Wu?

YW: The same. More and more patients are over 35, and some are really difficult cases. But the thinking is different in China. Patients do not easily accept IVF.

MH: And here patients easily accept assisted reproduction but they have difficulty accepting Chinese herbs.

PD: But am I correct in thinking that these differences reflect your confidence in your style of work? If you were more confident in your own style of practice - Chinese medicine - you would try more and also be more reluctant to refer them easily to IVF?

IH: I think it is the other way around. It is those patients who have been trying for many years or who are doing IVF and assisted reproduction that are approaching us for support to maximise their chances. They are already happy to combine both modalities.

PD: Do you not think that some of those patients would be happy to just do Chinese medicine?

ED: I can responsibly advise a 35-year-old patient to wait a year, and they will be happy to do so. But most of our patients are older - 38 or 39 - and they cannot afford that time. I have to be a responsible practitioner.

YW: Even if they are 38 or 39, if they have good ovarian function and the tubes are clear, of course you can treat them with Chinese medicine. The main questions are the time they have been trying to conceive and the reason they cannot become pregnant.

MH: There is also a cultural question. The issue is that here people are very happy with Western medicine. It is their culture and they are reluctant to try something else. Sometimes I have to convince patients to go for acupuncture or herbs, and they really don't want to. I have patients who laugh and say, 'Do you really believe in that?'

CL: This is interesting because you recommend it as a Western doctor. My experience is of patients having done

two rounds of IVF and in desperation look around to see what they can do to enhance the next cycle. Then you don't have time to do the necessary work as they are in such a hurry.

IH: However, with patients who come to me who are 42, but have only met their partner recently and everything seems fine I tend to say that maybe Chinese medicine is the better way forward, as IVF is often not a solution for the older woman. Then I do try to slow them down.

Sometimes I have to convince patients to go for acupuncture or herbs, and they really don't want to. I have patients who laugh and say, 'Do you really believe in that?'

MH: Of course.

YW: I think this is a big difference between China and the West. In China patients first think about Chinese medicine. They think first of regulating their cycle, and to see if there is anything wrong. The IVF patients we get are those who had at least two failed IVF cycles and there is no way forward for them with IVF. It is very rare that patients come to see us at the beginning of their IVF journey.

MH: In my clinic I try to identify the patients who would benefit from traditional Chinese medicine before I do IVF. Our patients fall into different categories: we have couples that need IVF because the man has poor sperm and the woman also has some problems; we try to refer those to Chinese medicine for preparation if we think they would benefit.

YW: Yes that is very good. Preparation.

CL: And of course sometimes those patients get pregnant during preparation for IVF.

MH: Exactly! Sometimes I send patients to Esther and I tell them they need absolutely four months of preparation before we can start the IVF ... and they never come back because they got pregnant. Because those patients believe only in Western medicine and want IVF, but they have no real problem, so we package it for them by saying it is IVF preparation.

ED: Yes so we sell it to them as preparation but the aim is really to get them pregnant naturally.

MH: The couples with the unexplained infertility for example.

PD: In midwifery, a sign of a really good midwife is that she delivers babies with the lowest rate of medical intervention; there is a well-known American midwife - Ina May Gaskin - who delivered hundreds of babies with very low levels of complications, caesareans and perineal cutting and so on. In that way this runs parallel to what Chinese medicine tries to do with natural pregnancy, and maybe the test of a really great doctor in treating infertility is how many couples can become pregnant naturally.

YW: Yes, in Western medicine a lot of infertility might be unexplained - perfect scans and hormone levels and so on - but in Chinese medicine we tend to always find a problem.

MH: In Chinese medicine everyone has a disease!

IH: That is true. I think practitioners of Chinese medicine also need to stand back a bit too and see what really is relevant. I start off with the menstrual history and the conception history and find out how long they have been trying, and then I progress to general health. And sometimes I have to say to them that according to Chinese medicine I cannot find much wrong with them.

YW: Do you really have patients like that? Who have had IVF and you don't find anything wrong with them?

IH: Yes, not very often, but it happens.

YW: I am surprised. Did you really check everything? We always find something!

MH: Exactly my point. [All laugh]

YW: But those patients improve with treatment. Western medicine says everything is OK but you look at their BBT chart and there is a too slow rise at ovulation or a little dip in the luteal phase ...

IH: Yes but those are little things - they don't necessarily explain chronic infertility.

YW: Little things here and there make a big problem: no pregnancy. Then you adjust little things and ... bang! ... the patient is pregnant. It may just be LUFs, and it looks like the woman ovulates, but the eggs don't come out - how can you get pregnant? Or the pulse may be too weak or too wiry or too slippery, and that is your only symptom. Sometimes I too am surprised that if you correct just the little things the patient conceives!

PD: Can I ask about anti-sperm antibodies. Do you see these patients and what results do you get?

YW: Yes, of course. This is due to a kind of hyper-immunity. And it responds very well if you do treatment according to their condition. There is also a lot of research that shows antibodies disappear or are reduced after treatment.

MH: Whenever we find problems with the post-coital test that suggests a problem with the female mucus we simply bypass the problem by doing IUI. We don't even need to be doing all those extensive tests like anti-sperm antibodies when the solution is just to bypass it. The solution is always the same - IUI.

PD: This is another example of the different working models of Chinese and Western medicine: whilst Chinese medicine can successfully treat anti-sperm antibodies and thus enhance a natural pregnancy, Western medicine doesn't even try to understand the problem or even carry out further tests, as they can just do assisted reproduction.

YW: In Chinese medicine you often find a pathogenic factor; they may even be tested positive for chlamydia or other infections, and if you treat that successfully - by clearing toxicity or damp-heat or blood stasis - the condition resolves.

MH: In Western medicine we used to try to treat it with cortisone but it's not effective, so we switched to artificial insemination. This is only partly a natural conception of course.

IH: In some patients who have been trying for quite a while - let's say two years - and it is unexplained, I often don't find anything obviously suggesting that there is an immune issue. They go to the IVF clinic for blood tests and and they test positive. And these patients also tell me that they are never ill, not ever a cold. After observing this my alarm bells go up whenever a patient says that. Because they may be the patients with auto-immunity problems. This is where Chinese medicine and Western medicine differ too: surely it is a good thing not to get a cold? In Chinese medicine that would mean strong defensive qi - a good thing. This is how ancient Chinese medicine may need to be adopted into modern times.

MH: Yes, an overprotective immune system. Esther and I have those patients. Esther doesn't find much, and I cannot find anything obvious, but then we check the immune system and they have an autoimmune issue.

PD: So this is strong anti-pathogenic qi, defensive qi, which is an overactive immune system. Dr Wu, do you see that in China?

YW: Yes, hyper-auto-immunity. And of course we treat that with herbs. It belongs to the category of hyper-immune infertility. There is often some form of toxicity or heat or

even blood stasis; and you must combine herbs that have been shown in research to treat that hyper-immunity. There are enough herbs with proven function for auto-immunity. First you need to make those cells come out and then you need to prevent new ones from forming. But you do this through your pattern differentiation. You can clear blood stasis or heat, you can nourish yin; there are some great herbs that are good for autoimmunity that nourish the yin. But you have to see what is going on in your patient. Base the treatment on that. Don't forget that!

IH: So in order to treat autoimmunity in Chinese medicine you have to be very good at diagnosis, at tongue and pulse and sign and symptom analysis ...

YW: Yes of course - you have to be very good at diagnosis. But you can also take the Western medicine diagnosis from the blood test to help you! If they have hyper-autoimmunity such as raised natural killer cells, or hypo-autoimmunity such as low blocking antibodies you choose different herbs.

MH: OK, so if you treat those different patterns this overactive or underactive immunity will disappear, as confirmed by blood tests?

YW: Yes. Of course this is a very new area of medicine, very new to China too. As a practitioner you have to work it out, and think, think, think of what is going on in those patients. In Western medicine the treatments are all messed up. They use Humira, a very strong drug.

MH: Yes, if you look at the evidence base for it, the evidence is of poor quality for both blood and endometrial autoimmunity. But there is nothing else out there and we have to practise as evidence-based as possible.

ED: And we do have patients for whom it worked ... they got steroids for autoimmunity.

IH: And if you see that a few times - patients with unexplained infertility where you can't really find anything particularly wrong - and Western medical treatment for autoimmunity works, meaning it results in a pregnancy, it makes you realise you cannot dismiss that concept.

MH: Yes.

IH: So this is a new discussion too in the Chinese medicine field. There seems to be some interest in mushroom therapy for autoimmune infertility. I have patients ringing up asking for Coriolus and Cordyceps and Reishi as good autoimmune regulators.

YW: The mushrooms may be good for an under-functioning immune system, but when they have an over-functioning immune system the body over-reacts, which means they have pathogenic factors, poison latent in their body. One product cannot be good for all, you must differentiate. This is the most important. Only very few herbs can rebalance you by themselves, double-regulate: make you higher when you are low or make you lower when you are too high. Herbs like Ling Zhi, Du Zhong and Dang Shen. You can use Western medicine research too but you should only ever apply herbs according to the pattern you find in a certain patient.

IH: And surely that is the beauty of Chinese medicine ...

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