

肝臟 The Liver

Chinese medicine functions/associations:

Stores the Blood
Makes the flow of Qi smooth
Controls the Sinews
(Jin, 筋 – this is the flesh that is like bamboo and has strength
it can be muscle also, but referring to strength not mass)
Shows in the nails
Opens into the eyes
Associated with the Po

Western functions/associations:

Synthesizes glucose, protein/amino acid, lipid
(including cholesterol, the precursor to other hormones)
Produces bile
Controls the production of platelets through thrombopoietin (as do the kidneys)
Produces coagulation factors
Produces IGF-1
In the fetus it is the site of red blood cell production (until the bone marrow takes over)
Breaks down insulin, and hormones
Breaks down toxic substances (meds etc.)
Converts ammonia to urea
Stores and releases (builds and breaks down) glycogen
Kupffer cells are responsible for phagocyte immunity
Produces albumin (regulates plasma osmotic pressure)
Produces angiotensinogen (regulating blood pressure with the kidneys)

We can see that the ancient Chinese had a sense of the modern Liver as related to blood (it is a very vascular organ, it creates the substances of the blood plasma, original RBC creation, and controls platelet production) and its role in smooth flow (releasing glycogen offering energy as needed, synthesizing hormones, blood pressure regulation, coagulating factors).

Although the Chinese functions of the Liver do not explicitly list resolving toxicity (the Gall Bladder - being the decision maker, deciding what is “toxic” and what to keep - might be seen as having that role), it is implied since the storage of blood implies a role in toxicity, and toxicity is seen as “heat in the blood” and thus related to the Liver.

There is another connection that is implied in the Liver but is not explicitly stated, and that is its relationship with Wei Qi, the skin, and the Lungs. To the Chinese this is obvious because the Liver (Gan - 肝) is something inside the body (Rou - 肉, shortened into 月) that is a shield (Gan - 干, to shield to interfere, also to attack). The Western understanding of this connection is via phagocyte production and detoxifying functions. (Note that the Lung is also implied in the character of the Hun - 魂 - which is the cloudy/vapourous 云 ghost 鬼, or it can be the “speaking soul”)

It is both the Liver and the Lungs that are responsible for Wei (衛 – to guard) Qi: by domain, the Lungs govern the skin/hair and the Liver governs the sinews, both layers are domain of the Wei Qi. The Liver protects and shield while the Lungs allows for circulation (Lung, Fei 肺, is to revolve, to make a circuit, 市, in the body).

Harmonization (和法) Strategies and the Liver:

One way to view the role of smooth flow is to see the Liver as a harmonizer, bringing things together, as creating peace.

Earlier on that role of the Liver was considered in the Shan Han Lun tradition as harmonizing the Shao Yang and is somewhat a reflection of the Liver as an immunological organ. The flagship formula here is Xiao Chai Hu Tang (小柴胡湯) and its variations. This formula is from a time when the Fu organs were still emphasized, hence the description is about Shao Yang and not about the Liver.

Later on we see the role of the Liver becoming a harmonizer (as a method to resolve when purging, pushing or quelling are not possible) with Xiao Yao San (逍遙散). The thinking behind this later school of Harmonization has been to allow the body to accept and adjust (as opposed to previous schools that pushed or drained) and reflects a new philosophical approach in Chinese medicine, with the role of the Liver now taking centre stage (which it still does to this day).

Xiao Yao San also demonstrates a principle in Liver treatment, which is that Liver Excess will always be mixed with a Liver Deficiency, and that Liver Blood is always to be built and protected. The Liver is like a sponge (full of blood), if it gets dry, it becomes thorny. The solution is not to cut the thorns off, but rather to moisten the sponge and soften it.

The principle of Liver Excess being complicated with Deficiency is discussed in Nan Jing 75 as well as the Liver's special relationship with the Lungs. It states that when the Liver is in Excess one should drain Fire and tonify Water rather than use Metal to overcome Wood. Notice that draining Fire is the strategy for Excess ("reduce son") but Nan Jing 75 states that we need to also "tonify mother" at the same time (tonify Water), showing us that even in Liver Excess there is a deficiency. This is the equivalent to the use of Bai Shao and Dang Gui in Liver draining formulas.

Nan Jin 75 asks us to use this strategy (which Nagano utilized in his Liver Excess treatment) in order to not use the Lung against the Liver and also implies that when the Liver is in Excess the Lungs are likely to be depleted. We can understand from that the Lungs and Liver have a special relationship that has to do with harmonizing the body. One aspect of this relationship is their mutual, opposing, pressure and movement of the diaphragm, and thus their influence on the autonomic nervous system.

Treatment Protocols for Liver:

Liver involvement will show on the body as pressure pain on (any of) the following:

Under the right ribs (pressing up and under)

Right Liv14

Right C3 (phrenic nerve reflex)

Right U.B.17, 18

Right T7 to T9 area

By Nan Jing the Liver is supposed to reflect left of the navel.

Left ST26, ST27, and below Kid16 are considered to be Oketsu

Although this is the Liver reflex area, Oketsu was originally demonstrated on tuberculosis patient and it reflects that the blood is viscous (piling) from infections, bruises, etc., and does not flow well through the portal vein into the Liver.

This is more of a blood issue and not a pure Liver issue.

Oketsu can also show as pressure pain on right G.B.20

(pressure pain on G.B.20 on both sides, is an estrogen reflex)

Liver Excess:

Shows as sharp pain under the right ribs or on Liv14

Actual physical damage, radiation victims:

use right Kid7, SP7, HT3, P.4 (3 fingers below P.3)

Liv2 pressure pain (often alcohol or generation of alcohol use):

use right Liv4 + Liv8

Mouth sores type:

use Liv3, SP3 (both sides)

Liver Deficiency:

Shows as dull pain under the right ribs or on Liv14, or weird feeling when pinching

Liv1 (note four possible locations – as a regular Jing Well, on the joint,
in between, and lined with centre of nail)

Fatty Liver:

May show as uncomfortable feeling when pushing the diaphragm on inhalation hold

Full treatment (used for obese types):

Left G.B.26, left ST27, Ren6 (if pulse is not slow), right ST25, right Liv13

Short version (regular patients):

Right ST25, Liv13

Unclassified:

Shows as mixed pain under the right ribs or on Liv14 (not clear if sharp or dull)

Kid9, G.B.27 towards the leg

Other Liver points – Right Si Shen Cong (level with DU20 between U.B. and G.B.)
Jue Jue Yin

All of the above will show something on right Liv14 and/or under the right ribs and possibly right C3

Oketsu:

Shows as pressure pain on left ST26, ST27, to below Kid16 area
(does not have to be the whole area)

use left Liv4 + LU5

Oketsu Kai:

release the Inner Thigh and/or Inguinal on the left, then left Liv4+ LU5

If right G.B.20 is involved, also needle left ST27 (area)

Detox:

May not show on the Liver (though it might), you may need to use ST9 as the reflex

Kid9, L.I.15

This combination was originally used for skin disorders

Endometriosis or Gout types:

Liv5 – you will find a hole/dent in the bone – use moxa

Liv5 is also a good point to detoxify the liver (add to Kid9, L.I.15)
as well as for infections/inflammations (in the lower Jiao, but also skin)

note that acne below the mouth, while it might be infection based, it is considered hormonal and calls for Adrenal treatment (Kid6 + Kid27)

Cyst type (breast or ovaries):

use Liv8

Estrogen Type:

G.B.20 area on both sides

This type may not show on the Liver but if there is Liver involvement (as the liver breaks down estrogen)

use U.B.66

Cancer Type:

In cancer (or post) always check liver and thyroid and treat.
add Liv9 and Under-2nd-Toe

Back Treatment for all Liver types:

use Left U.B.35 + right U.B.17, 18 or T7 to T9