

5. *Hasha (Thymus serpyllum)*,
6. *Black Chana*,
7. Mur Makki (*Commiphora myrrh*),
8. *Gil Armani* (Armenian bole)

All these drugs are pounded and mixed with the oil of *Sosan* and *Momiyai* (Bitumen, mineral pitch) and tablets are made. Rewand Chini (Rhubarb, Rheum Rheum officianale Baillon.) (*Rheum emodi*) Cheeni, Teen Makhtum (White bole) mixed with Habbul Aas is also beneficial.

In the last stage when *Itehab* and *Warm* is more, a tablet of *Zarawind* and *Lac Maghsool* (Cateria lacca) is made and sometimes yellow oxide of arsenic (*Zirnikh Asfar*) is mixed and given to eat then paste of following drugs is applied locally:

1. Uod, *Zafran (Crocus sativus)*,
2. Habbul ghar (*Laurus nobilis*),
3. Muqil (*Commiphora mukul*),
4. Zareerah, Mastagi (*Pistacia lentiscus*),
5. Wax,
6. Oil of *Sosan*

All these drugs are made into paste and applied over the lesion.

Section 18: *Khafqa al Kabid*

It is the feeling of trembling movement of the liver due to obstruction of vessels passing through porta hepatis in the liver. In this condition, the liver becomes distended causing severe pain. Flutter movement of the liver leading to spasm and pain in the liver. It is caused by the obstruction in any vessels connecting the liver.

Treatment: Dissolution of obstruction is done by Siknajbeen Bazuri mixed with Rewand Chini (*Rheum emodi*) and *Zafran (Crocus sativus)*. For evacuation, Izkahr, Kasus (*Cuscuta reflexa* Roxb.) seeds, *Fumaria officinalis* (Shahtra) Afsanteen (*Artemisia absinthium* Linn) and Ghafis (*Agrimonia eupatoria*) are given.

Section 19: *Hasat al Kabid* (hepatolithiasis)

It is a condition in which calculi are formed within the liver. Like any other organ of the body, calculi are formed in liver also. In this condition patient suffers from vomiting after complete digestion of food, irritation, pain and heaviness at the site of liver.

Sometimes sandy substances are produced in liver.

Section 17: Treatment of *Zarba, Saqta and Sadma* (Trauma, rupture and Injury to the liver)

Injury of liver in which it becomes swollen and in severe cases bleeding occurs through vomiting and purgation. Sometimes contusion or trauma occurs to the liver by falling or injury, at that time all attempts are made to prevent any type of hemorrhage and acute inflammation. If there is *Warm* it should be treated on the same line as mentioned in the *Warm* of liver. Sometimes a big part of liver is displaced from its site causing severe pain in the hypochondrium. It may be relieved by massaging while the patient inhales deeply and liver comes back to its position. In case of bleeding some astringent drugs should be given with *Rawade* (Derivative) drugs. If blood coagulates inside the liver, some dissolving drugs like *Momiyai* (*Bitumen, mineral pitch*) and oil of *Zanbaq* should be applied. Besides, all drugs described in the Section of *Warm* also can be used.

In case of heat, inflammation and hemorrhage following drugs are beneficial:

Rewand Chini (Rhubarb, Rheum *Rheum officianale* Baillon.) (Rheum emodi), Gulnar, *Damul Akhwain* (*Dracaena cinnabari*), Sheb Yamani (Alum) with the water of Safarjal (*Cydonia vulgaris*)

In case of lesser heat derivative, dissolving and glutinous drugs are beneficial: Ingredients:

1. *Vateria indica* Linn. (yellow Anber, *Kaharba Shamai*)
2. Ikleel al Malik (Nakhuna, *Trigonella uncata* Boiss.),
3. Rose,
4. *Sunbul Hindi* (*Nardostachys jatamansi*),
5. *Zafran* (*Crocus sativus*),
6. *Mastagi* (*Pistacia lentiscus*),
7. *Kundur* (*Boswellia serrata* Roxb, *Olibanum*),
8. *Gil Armani* (Armenian bole)

All these drugs are mixed with the water of *Lisanul Humal* (*Plantago major* Linn) and made into tablets of 4 gm and used.

Another useful formulation:

1. *Maqlyun*
2. Lac Maghsool (*Cateria lacca*),
3. Rewand Chini (Rheum emodi),
4. *Zafran* (*Crocus sativus*),

More potent drugs are *Tamar* (Dried dates), decoction of *Joda*, *Zufa* (*Hyssopus officinalis*), *Ficus hispida* Linn, honey water, barley water, Kasni, Mur Makki (*Commiphora myrrh*), Hulba (*Trigonella foenum-graecum* Linn.).

Drugs for atenuation, opening of obstruction and Taqwiat are:

Afsanteen (*Artemisia absinthium* Linn), Zafran (*Crocus sativus*), Sunbul (Nardeen, *Nardostachys jatamansi*), Fuwah, Hasha, *Favania* (Uood Saleeb, *Paeonia emodi* Linn.), Mastagi (*Pistacia lentiscus*), Sanbhalu, Ghafis (*Agrimonia eupatoria*), Qanturion (*Centaurea officinale*) with oil of Mastagi (*Pistacia lentiscus*), and Sosan

Poultice of following drugs is useful:

Barley powder, *Ikleel al Malik* (*Nakhuna*, *Trigonella uncatata* Boiss.), *Matricaria chamomilla* Linn Chamomile (Babuna,), Asl al sus, Khitmi (*Althaea officinalis*, marsh mallow,), *Ficus hispida* Linn, Zabeeb (*Vitis vinifera* Linn., Resin), roasted onion and *Roghan Katan* (oil of *Linum usitatissimum* Linn.) seeds are made into paste and applied.

When signs of suppuration appear, the patient should lie down on liver side and take hot bath. He should also roam around if possible. After rupture of the abscess s/he should be given the purifying drugs like honey water followed by the drugs that excrete the morbid materials from the body either purgative or diuretics as per requirement. Strong diuretics are not given as they can injure the bladder.

These patients should be treated on the same line as those of internal abscesses of abdomen. and at that time Foods used should have purifying action and non irritant like starch, egg white, *Malva sylvestris* (mallow, *Khubbazi*), barley and rose cooked in honey water may be given.

Sign of rupture is that patient suffers with shivering, pain and heaviness is reduced.

If the abscess has burst inside the abdomen then it is essential to incise the skin near the inguinal muscles (*Azlaat Urbia*) till peritoneum is exposed, then an opening is made into it and a tube is put into to drain out the pus. Then post surgical treatment like use of ointments etc should be done.

Diets: Light foods, easy digestible like barley water with *Sikanjabeen*, then deobstruent foods, half boiled egg yolk and laxative soup. After rupture, tonic foods like *Maul Laham* (Meat soup) and some strong fragrant condiment are also preferred. ²⁷

Treatment of *Dubaila*: In the beginning when *Warm* is felt to proceed and collect the materials, derivative drugs are applied as poultice. Barley water mixed with *Sikanjabeen* is given to drink. If possible venesection of basilica vein should be done or cupping is applied on the back of liver area. Sometimes purgatives are also needed. If materials still are accumulating even with all these measures then *Muraqqiq* (liquifacient) and *Mufattih Sudad* (deobstruent) drugs should be used, because there may be thick materials in the inflamed liver which should be softened first for dissolution.

If suppuration had occurred but not ruptured yet then strong dissolving drugs should be used internally and externally then the materials should be evacuated by the route to which it is heading like purgation or diuresis. Strong drugs should be avoided to prevent the bladder from injury. After expulsion of pus it should be cleansed by giving honey water.

Purgatives are needed on two occasions in this treatment:

1. Before rupture of the abscess so that the morbid matter is lessened and
2. After rupture of the abscess and suppuration when it is confirmed that the abscess on the concavity of the liver and headed towards the intestine, at that time light laxative like Alhagi pseudalhagi (*Turanjabeen*), *Sheer khisht* (Fraxinous ornus, Manna), *Khiarshanbar* (Casia fistula), red sugar should be mixed with the water of *Lublab* (*Neelofar*, *Nymphaea alba*, Water lilly), *Hinduba* (*Chicorium intibus*, *Kasni*).

More potent laxatives like decoction of seeds and roots mixed with Ghafis *Gentiana olivierii* Griseb. (*Agrimonia eupatoria*), Alhagi pseudalhagi (*Turanjabeen*), *Sheer khisht* (Fraxinous ornus, Manna), *Khiarshanbar* (Casia fistula), *Aloe barbadensis* (Sibr Saqutri) , *Afsanteen* (*Artemisia absinthium* Linn) can be used if needed. Light enema can also be given as per need.

Purgative drugs helpful for suppuration and rupture:

Decoction of roots of Ghafis (*Agrimonia eupatoria*), oil of Khask and *Zanbaq* (Iris), *Khiarshanbar* (*Casia fistula*), and sugar are useful.

If the morbid matters collect on convexity, purgative are not needed except in the beginning before suppuration, when suppuration occurs diuretic drugs are used.

Other Drugs helpful for suppuration:

Milk of donkey, red sugar, water of vegetable roots, *Zabeeb* (*Vitis vinifera* Linn., Resin), *Ficus hispida* Linn, *Persiaoshan* (*Adiantum capillus veneris*), *Trigonella foenum-graecum* Linn. (Hulba), sweet almond oil are used.

Local application: Various compounds can be applied as *Zamad*.

1. *Zamad* of onion, Sunbul (*Nardostachys jatamansi*) with pistachio oil and decoction of Soya,
2. *Zamad* composed of *Trigonella foenum-graecum* Linn. (*Hulba*), *Ficus hispida* Linn, Suddab (*Ruta graveolens*), Ikleel al Malik (*Nakhuna*, *Trigonella uncatata* Boiss.), Natrun
3. *Zamad* composed of *Ushuq* (Gum ammoniac), *Muqil* (*Commiphora mukul*), *Zafran* (*Crocus sativus*), with liniment of wax and oil of *Henna* (*Lawsonia inermis*)
4. *Zamad* composed of *Trigonella foenum-graecum* Linn. (*Hulba*), dung of goat, *Qardmana* (*Zeera Siah*), *Fudanj*, *Karnab*, *Ushna* (*Parmelia perlata*), Suddab (*Ruta graveolens*)²⁶

Swelling caused by an injury that is in the beginning stage without much hardness:

First apply the ointment then simple cupping is done on the lesion without taking out of blood, then strong dissolving and attenuating drugs are used and every fifth day a paste of Natrun and yellow sulphur is applied followed by *Tila* of *Brassica nigra* Linn..

If the hard swelling turns into cancer, the recovery becomes difficult and only useful medicine can be *Dawa Asqaltiyadas*.

Diets: Easily digestible foods like half boiled egg yolk, barley water and all foods advised in *Suddah* of liver. Meat should be avoided.

Treatment for *Warm* of muscles should be carried out on the general lines of swellings of liver except that strong drugs also can be used here. Treatment for *Warm* of mesentery should be carried out on the general lines of swellings in concavity of liver.

Section 16: *Dubaila al Kabid* (Abscess of the liver)^{5, 12, 14, 17}

It is an abscess of liver resulting from its acute inflammation. When this inflammation does not subside, it gets suppurated. It is usually accompanied with loss of appetite, restlessness, high fever, and pain, redness of face and eyes and irritation of liver.

Usually it occurs following *Warm Harr* when the matters start collecting in any one place in the liver, abscess is formed. It is accompanied with high fever, pain and other symptoms like shivering, rigor and difficulty in lying even flat on back. After suppuration, severity of symptoms begins lessening. When abscess is ruptured out there is rigor, discharge of pus or pus mixed with blood in stools or urine and symptoms slowly subside. Sometimes the abscess bursts into abdominal cavity then no discharge in stool or urine. The abscess forms either in liver substance or outer surface, the pus is also different as it will be black in former and white in later condition.

7. *Brassica nigra* Linn.,
8. *Qiththa* seeds (*Cucumis sativus*),
9. *Usqulo Qandaryun*,
10. Root of Jaosheer (*Ferula galbaniflua* Boiss.)
11. *Fuwah (Majceeth)*,
12. *Karnab* seeds,
13. *Zaravand*,
14. *Filfil siah (Piper nigrum)*,
15. *Sunbul Hindi (Nardostachys jatamansi)*
16. *Qust* (Costus root),
17. *Jarjeer* (*Eruca sativa*),
18. *Baqla Yahudi (Amaranthus caudatus)*,
19. Opium
20. *Ghafis Gentiana olivierii* Griseb.
21. *Habbul Arar (Juniper communis)*

All these drugs are taken in equal amount and made into confection with honey and taken with honey water.

Moreover, other compound drugs like *Dawa al Kurkum*, *Tiryag Arba'a* and tested light compound drugs described in Section of *Dubaila* like *Dawa Tarahshaquq* are also useful. Drugs mentioned in Warm Barid given with Rasot (extract of *Zarishk*, *Berberis aristata*) are beneficial.

Other useful formulations:

1. *Zulal* (Soaked water) of *Qust (Costus root)*, *Ghafis (Agrimonia eupatoria)*, *Trigonella foenum-graecum* Linn. (*Hulba*), *Zabeeb (Vitis vinifera* Linn.) with oil of almond and walnut,
2. *Zulal* of *Juntiana (Gentiana lutea* Linn.), *Afsanteen (Artemisia absinthium* Linn), *Ikleel al Malik (Nakhuna, Trigonella uncatata* Boiss.), *Zabeeb (Vitis vinifera* Linn.) and *Ficus hispida* Linn,
3. *Zulal* of *Afsanteen (Artemisia absinthium* Linn), *Suddab (Ruta graveolens)*, *Izkhar* (*Rusa* grass *Andropogon shoenantus* Linn.), *Trigonella foenum-graecum* Linn. (*Hulba*), *Zabeeb (Vitis vinifera* Linn.) and
4. *Zulal* of *Turmus* (*Lupine, Lupinus x hybrida*), *Qust* (Costus root), *Afsanteen (Artemisia absinthium* Linn) with castor oil

drug is given prior to the use of purgatives otherwise it will be injurious. The patient is advised to sleep on right side as it will help in dissolution of the swelling.²⁵

Simple drugs beneficial in this case:

Sanobar (Pinus gerardiana), Barley flour, *Qust (Costus root)*, oil of *Nardeen (Nardostachys jatamansi)*, *Balsan (Balsamodendron opobalsamum Linn)* and *Qust (Costus root)* cooked with *Suddab (Ruta graveolens)* and Common dill (*Anethum graveolens*, *Shibbat*) and filtered. Extract of fresh *Darmena*, *Fanjkusht* seeds (*Sanbhalu, Vitex trifolia*), *Ghafis Gentiana olivierii* Griseb. (*Agrimonia eupatoria*) Karafs, (*Apium graveolens* Linn.), *Razianaj (Foeniculum vulgare)*, *Hinduba (Chicorium intibus)*, *Gaozaban, Borago officinalis* Linn., *Turmus (Lupine, Lupinus albus* Linn,), *Sunbul (Nardostachys jatamansi)* , *Filfil Siah (Piper nigrum)*, *Bitter almond, Damul Akhwain (Dracaena cinnabari)* root, *Habbul ghar (Laurus nobilis)*, *Majeth (Rubia cordifolia)* , *Usara al Sheeh (Darmena, Artemisia maritime* Linn, *Worm seed*

Compound drugs those are beneficial in this case:

***Qurs Muqil (Commiphora mukul)*, its ingredients:**

1. Red rose,
2. *Sunbul (Nardostachys jatamansi)*,
3. *Zafran (Crocus sativus)*,
4. *Qust (Costus root)*,
5. *Mastagi (Pistacia lentiscus)*,
6. Bitter Almond,
7. *Muqil (Commiphora mukul)*

Muqil (Commiphora mukul) is dissolved in alcohol and remaining drugs are powdered then both are mixed together to form the tablet. Dose: One tab with honey water or decoction of seeds or with the water of *Neelofar (Nymphaea alba*, Water lilly) and *Kasni* in hot conditions.

Dawa Asqalandus, Ingredients:

1. *Kamafitus, (Kakronda Blumea balsamifera* Dc.,)
2. *Farasiun (Nigella sativa)*,
3. *Karafs, (Apium graveolens* Linn.),
4. *Juntiana (Gentiana lutea* Linn.)
5. *Tukhm Fanjkusht, Sanbhalu* (seeds of *Vitex trifolia*),
6. Gall bladder of *Dubb (Bear)*,

21. *Habbul ghar (Laurus nobilis)*,
22. Opium,
23. *Bazrul Banj (Hyoscyamus nigrum)*,
24. *Qust* (Costus root),
25. *Nankhwah* (Ajwain Desi, Kamun, *Trachyspermum ammi*) ²⁴

All these drugs are powdered and made confection with honey.

Ingredients of *Dawa al Sum*.

1. *Juntiana (Gentiana lutea* Linn.), Ghafis *Gentiana olivierii* Griseb. (*Agrimonia eupatoria*),
2. *Zaravand (Aristolochia rotunda)*,
3. *Qust* (Costus root),
4. *Dar Filfil (Piper nigrum)*,
5. *Asarun (Asarum europium)*,
6. *Karafs, (Apium graveolens* Linn.) seeds,
7. Carrot,
8. *Nankhwah* (Ajwain Desi, Kamun, *Trachyspermum ammi*),
9. *Enjidan, Sasalius , Hilteet (Ferula foetida* Regel. asafoetida)
10. *Fudanj Jabali (Mentha arvensis)*,
11. *Suddab (Ruta graveolens)*,
12. *Castoreum (Jund Bedastar)* bedastar,
13. *Satar Farsi (Zataria multiflora)*

All these drugs except Castoreum (Jund Bedastar) are powdered, Castoreum is dissolved in water then all to be made confection with honey.

Treatment of Warm Sulb (Hard Lump of liver)

Prolonged and strong hardness of liver swelling can not be cured it is only be cured at initial stages. The line of treatment:

1. First cleansing of the body from thick humors is done by use of medicine. It is composed of drugs that have property of moderate laxation, dissolving, attenuating, and moderate warming and also have the power to dissolve the obstruction, besides they should have tonic, astringent and aromatic properties. Such drugs are usually bitter and acrid in taste. Most suitable drugs should be selected as per need and used internally.
2. In case of constipation, it should be cured by use of laxative or enema.
3. *Sanobar* (*Pinus gerardiana*), *Katan (Linum usitatissimum)*, *Ilakal Butum (Pistachia terebinthus)* are effective in hard swelling of liver. Care should be taken that no hot

and produces cold then bread of fermented baked in oven is better. Sweets should be avoided.

Treatment of *Humra*: Its cure is close to that of Falghamuni. Here diuretic and purgative that are inclined to the cold are used. Zamad of Neelofar (*Nymphaea alba*, Water lilly), water of Kakanj (*Physalis alkekengi*) and Behi, sandal, camphor is applied locally.

Treatment of Warm Barid (Cold Lump)

Advia Mulattifa wa Jalia ((Attenuent and Cleansing) drugs are used, likewise above mentioned Munzij, Mudirr and Mufattih drugs with astringent, tonic and fragrant actions are also used.

Among the oils, castor, *Jasmeen* and olive oils are preferred.

Best *Zamad* are selected for local application, internally *Dawa al Kurkum*, *Dawa al Lac Maghsool* (*Cateria lacca*) like compound drugs are much beneficial.

Ingredients of a useful compound *Dawa al Unsul*:

1. *Unsul Mushawwah* (roasted *Scilla indica*),
2. Sosan,
3. Asarun (*Asarum europium*),
4. Karafs, (*Apium graveolens* Linn.) seeds,
5. Aneesun (*Pimpinella anisum* Linn),
6. Sunbul (*Nardostachys jatamansi*),
7. Saleekha (*Cinnamomum cassia*),
8. Castoreum (*Jund Bedastar*) bedastar,
9. Fudanj (*Mentha arvensis*),
10. Acorus calamus (*Waj Khurasani*),
11. *Aqar Qarha* (*Anacyclus pyrethrum* D.C., Pellitory)
12. Dar Filfil (*Piper nigrum*),
13. *Jauzbua*
14. *Althaea officinalis*, marsh mallow (*Khitmi*) seeds,
15. *Ustokhuddus* (*Lavandula stoechas*)
16. Suddab (*Ruta graveolens*)
17. Badian (*Foeniculum vulgare*),
18. Zaravand (*Aristolochia rotunda*),
19. *Qurfā* (*Portulaca oleracea Parselane Khirfa*, *Portulaca oleracea*),
20. *Zanjabeel*,

5. Hulba (*Trgomella foenum-graecum* Linn.)

It is added with little astringent drugs like *Linum usitatissimum* Linn.(Katan), Pistachio oil, *Matricaria chamomilla* Linn Chamomile (Babuna,) oil and Roghan Shibbat (Common dill, *Anethum graveolens*) oil, all these drugs relieve the inflammation.

Another formulation for *Zamad*:

1. Bisr (unripe dates),
2. Ausaj extract (an African tree),
3. Zafran (*Crocus sativus*),
4. Mastagi (*Pistacia lentiscus*),
5. *Roghan Gul*, rose oil,
6. *Mom* (wax)

All drugs are made into paste and applied locally over the liver.

Then *Advia Mufattiha* and *Muhallila* mixed with astringent drugs are applied as paste like *Ersa* (*Iris ensata*), *Asarun* (*Asarun europium*), *Ushna* (*Parmelia perlata*), *Jada*, *Satar Farsi* (*Zataria multiflora*) , *Sheh*, *Darmena* (*Artemisia maritime* Linn), *Karnab* seeds (*Brassica oleracia*), *Muqil* (*Commiphora mukul*) added with tonic drugs like *Aas*, *Fuah* (*Rubia cordifolia*, *Majeeth*), *Habbul ghar* (*Laurus nobilis*), *Zafran* (*Crocus sativus*), *Mur Makki* (*Commiphora myrrh*), *Mastagi* (*Pistacia lentiscus*), *Wax* with oil of *Nargis* and *Sosan*.

Another tonic and *Muhallil* formulation:

1. *Zafran* (*Crocus sativus*),
2. *Muqil* (*Commiphora mukul*),
3. *Mastagi* (*Pistacia lentiscus*),
4. *Meca Sailsa* (*Altingia excelsa*)
5. *Shama* (Wax)
6. *Ushuq* (*Gum ammoniac*),
7. *Zuft* (*Pinus gerardiana*)
8. *Sunbul* (*Nardostachys jatamansi*),
9. *Habb Balsan* (*Balsamodendron opobalsamum* Linn),
10. *Roghan Sosan*

All these drugs are mixed together and applied locally.

Warm of liver with Diarrhea: *Qurs Zarishk*, *Berberis aristata* (Rasot), *Qurs Rewand Chini* (Rhubarb, *Rheum Rheum officianale* Baillon.) (*Rheum emodi*) like compounds are used.

Diets: Best food is barley water as it is easily digestible and diffusible, prevents obstruction

7. *Razianaj (Foeniculum vulgare)* ²³

All these drugs are pounded together and tablets are made. Camphor may be added in case of fever and for purpose of tonic to liver Lac Maghsool (*Cateria lacca*) and Rewand Chini (Rhubarb, Rheum *Rheum officianale* Baillon.) (*Rheum emodi*) also are added. Rubbus Sus (*Glycyrrhiza glabra* Linn), Traga canth (*Kateera*) and *Alhagi pseudalhagi (Turanjabeen)*, are added in case of cough.

Drugs strong in actions and suitable for liver which don't create much heat:

1. *Badian (Foeniculum vulgare)*,
2. *Gaozaban (Borago officinalis* Linn.),
3. *Izkhar*,
4. *Karafs, (Apium graveolens* Linn.),
5. *Neelofar (Nymphaea alba*, Water lilly)

These drugs can be used with *Sikanjabeen* in first stage when a little maturation has just started.

At the time of full maturation *Khyarshanbar (Casia fistula)* with *Arq Badian* (water of *Foeniculum vulgare*), *Mako (Solanum nigrum)* and *Neelofar (Nymphaea alba*, Water lilly) has been found useful. *Bazr al Qurtum (Carthamus tinctorius)*, *Bisfaj Fustuqi* (*Polypodium vulgare* Linn) and *Utangan (Blepharis edulis)*, is included in food.

At the time of reduction of swelling potent drugs like *Aloe barbadensis* (Sibr Saqutri), *Ghareequn (Agaricus campestris)*, *Turbud Safed (Ipomea turpethum)* and *Afteemun (Cuscuta reflexa* Roxb.) is included.

Use of enema in initial stage when there is constipation. *Aab Barg hoqandar*, *Namak Shora*, or red sugar, at the time of resolution it is added with *Bisfaj Fustuqi* (*Polypodium vulgare* Linn), *Qanturiun*, *Zufa (Hyssopus officinalis)*, *Satar Farsi (Zataria multiflora)* and strong enema is given.

Poultice used in the beginning of the swelling should be warm; it is composed of *Khirfa*, *Portulaca oleracea*, Pumpkin, rose water, Sandal, *Kafur*, *Safarjal (Cydonia vulgaris)* and Barley flour.

Advia Muhallila, (Anti inflammatory drugs):

1. *Mastagi (Pistacia lentiscus)*,
2. *Matricaria chamomilla* Linn Chamomile (Babuna,),
3. *Ikleel al Malik* (Nakhuna, *Trigonella uncata* Boiss.),
4. Barley flour,

Swelling in concavity of liver: Drugs like seeds and roots of *Kasni* and *Mako* (*Solanum nigrum*) are soaked in water and given then laxatives like *Casia fistula*, emulsion of *Kasni* and *Aab Anar* (water of *Punica granatum* Linn) is given.

Swelling in convexity of liver: Diuretic drugs like *Sikanjabeen*, cucumber seeds are given and purgatives are avoided.

Many drugs and diets that contain coldness and astringency like *Punica granatum* Linn., apple and guvava can harm by other way as they can narrow down the passage to gall bladder thus making the flow of bile very difficult that results into increased swelling, so use of astringents though with dissolvent drugs always have some risk to produce hard swelling and obstruction of bile inside the liver. Therefore use of *Muhallil* in this kind of *Warm* should be more rapid in comparison with other types of swellings to prevent the hardness. Use of *Murkhi* (relaxant) drugs can be very dangerous in this condition. Just liver is more vulnerable to obstruction and hardness, it is easily susceptible to relaxation, therefore much precaution should be taken for use of drugs or foods. Barley water is beneficial in this condition because it cleanses without acrimony and does not produce obstruction. Irritant and astringent drugs produce more harm on concavity of liver rather on convexity.

It is also compulsory to evacuate the materials through nearest route therefore materials from *Warm* on concavity should be evacuated through purgation while materials from *Warm* on convexity should be evacuated through diuresis. Constipation or excessive purgation should be evaded in all conditions because it is more risky therefore moderate nature in therapy should be observed.

Suitable drugs for *Warm* in the beginning when there is excessive heat:

Juice of *Hinduba* (*Chicorium intibus*), juice of *Solanum nigrum*, juice of *Kakanj*, juice of coriander, pumpkin, cucumber and *Kasus* (*Cuscuta reflexa* Roxb.), *Sikanjabeen* of sugar, barley water, *Asa al-Rae* (*Amranthus caudatus*), juice of *Lisanul Hamal* (*Plantago major* Linn), and if suitable *Afsanteen* (*Artemisia absinthium* Linn) and *Qasbuz Zareera* (*Swertia chirata*).

Suitable compound drugs for *Warm*:

1. *Zarishk* (*Berberis aristata*)
2. *Gul Surkh* (Rose)
3. *Tabasheer* (*Bambusa arundinacea*)
4. *Khiyar*,
5. *Kaddu* (Pumpkin)
6. *Kasni* seeds,

Heaviness is severe but fever, loss of weight, loss of appetite, fading of body color is not significant.

Sometimes hard *Warm* follows hot *Warm*, presence of heaviness and dyspnea indicates that hot *Warm* turned into hard *Warm* and is followed by ascites because liver becomes incapable to function properly. It may be fatal in case the liver passages are blocked and cause dissolution of physical power.

Treatment is effective only in the initial stages; it becomes difficult in later stages. Pain is severe in case the tumor is malignant, body colour change; loss of appetite, hiccup and nausea occurs and at this stage if no feeling of pain then it means liver function is going to stop completely. The liver is more susceptible to hardness and obstruction especially after abundant use of thickening and astringent drugs in *Warm Harr*.

Purgatives are effective if *Warm* is in concavity of the liver and diuresis is done in case the swelling is in convexity of liver.²²

***Warm Masariqi* (Enlargement of Mesentery)**

Symptoms will be same as in *Warm* of liver but degree of fever will be reduced here. Heaviness and spasm will be directed to the stomach and abdomen. When stool is chylous and watery accompanied with light fever and spasm with no symptoms of *Suddah* or *Warm* of liver then acute *Warm Masariqi* is diagnosed. Hard swelling and obstruction in mesentery is difficult to differentiate as it needs deep consideration. Discharge of pus like substance after few days may be due to *Warm Masariqi* and this pus is pale yellow different from the *Warm* of liver which is red and like blood.

Treatment of *Warm Harr Damvi* (Hot sanguine swelling)

It is essential to look first the state of accumulation, then the potency and age of the patient and seasonal condition. If possible it is better to do venesection of basilica vein or of the median cephalic vein. if patient is strong all impure blood should be taken out at a time otherwise bled out little by little in different sittings. Use of astringent and *Ravade* (derivative) drugs without doing *Fasd*, it may turn into hard *Warm*, and with use of dissolving drugs it may lead to more irritation and pain. Therefore it is better to do venesection if no contraindication is present then if the disease is in early stage give cooling and derivative drugs. at this point due care should be given to prevent from turning into hard swelling as liver is more susceptible to convert into hardness, therefore it is also mixed drugs of *Mulattif* (attenuant) and *Mufattih* (deobstruent) and cold liniment is also applied. Sometimes their abundant use may cause hardness of the swelling and sometimes it is burst towards the kidney.

Hippocrates said that black stool in the beginning of acute diseases is sign of *Harr Warm* in liver; pulse is rapid, *Mauji*, and regular. Hot *Warm* either is dissolved then all signs and symptoms are disappeared or becomes hard *Warm* then its symptoms will appear or it comes together and turns into *Dubaila* (Abscess) producing its symptoms. The reason for transforming of Hot *Warm* into hard *Warm* may be severity in coldness, astringency and use of *Mughallizat* in *Warm Harr*.

The difference between *Warm Harr* and *Zat Janb* (Pleurisy): *Warm Harr* there will be no expectoration following cough, pain and heaviness will be felt on right side, color of tongue and the body will be changed, pulse is not *Minshari* unlike in pleurisy. *Warm* on convexity will be felt by hand. There will be difficulty in breathing and inspiration if *Warm* is on concavity due to spasm in diaphragm. The crisis of *Warm Harr* on convexity of liver and its muscles will be resolved by epistaxis through right nostril or sweating or urine while *Warm* on concavity will be resolved by sweating or bilious diarrhea or vomiting.²¹

***Mashra Kabidi* (Bilious and Sanguine swelling Liver)**

***Mashra Kabidi* is described by Ibn Sina. It has the following symptoms:**

Heaviness is less but blackness of tongue, coloring of urine, acrimony and blaze is increased. Pale color of the body, pale color stool, alternate fever intense, cold and moist becomes most beneficial, pulse is rigid, saw like, wave like, small, regular and rapid.

***Warm Falghamuni* (phlegmonosis hepatoma)**

There will be Signs of hot *Warm* and contrary to the symptoms of *Mashra Kabidi* (Bilious Liver), redness of face and congestion of vessels, white colour urine.

***Warm Barid* (Cold Lump of Liver)**

There will be more heaviness than that in hot *Warm* but with no thirst, fever or blackening of tongue. Age, color, nature and earlier treatment also can give some clue to it.

***Warm Balghami* (Phlegmatic Tumor of Liver)**

Edema of the skin, leaden color, hardness is not felt, intensity of pulse with all symptoms of cold *Warm*.

***Warm Sulb o Sartani* (Hard and malignant liver, Hepatoma)**

Mostly it occurs following any earlier tumor but sometimes it originates from the beginning following injury which turns to be hard swelling, it can be diagnosed by palpation and black colour of urine. If there is no early ascites, its *Warm* can be felt prominently because hypochondrium becomes weak and emaciated there is *Warm Hilali* (Semi lunar tumor) with no pain. The pain arises at the time of food intake but disappears on empty stomach.

2. *Warm* in convexity of liver results in diaphoresis, diuresis, or epistaxis. The patient may have dry cough and dyspnea, pulling down of clavicle, less urine output. Lunar shape liver is felt below the right rib.
3. *Warm* in concavity of liver may result in diaphoresis, vomiting or diarrhea. The patient may feel heaviness. Pulling will be less but the pain will be more due to pressure on stomach without cough. There may be swelling of mesentery, nausea and vomiting. Stomach function is also disturbed.
4. Every *Warm* in liver acute or chronic affects its blood forming system and results in ascites. Shifting of hot *Warm* from liver to spleen is safe but if the order reversed it is dangerous.

According to Galen, the causes of hiccups are the pungent and acrid humors that fall on stomach due to acute inflammation of liver. The nearer the enlargement of liver to its capsules and vessels the greater is the pain and lesser is the fever. *Warm* of liver is usually the precursor of dropsy and it may be fatal if it is accompanied with diarrhea.

Difference between *Warm* (Tumor) of Liver and *Warm* of muscles

Difference between *Warm* of Liver and *Warm* of muscles placed on *Maraq* (Hypochondrium) is according to *Waza*, Shakal and *Araz*. According to *Waza*, *Warm* of muscles is always prominent while *Warm* of liver is not so prominent especially if it is on concavity and it is in lunar shape. *Warm* of muscles is elongated. Rapid dryness and emaciation in *Maraq* is a confirm diagnosis of *Warm* of liver.

***Warm Harr* (Hot Lump)**

Causes: It may be arisen by injury or trauma to the liver. It is also caused by all sources of *Warm* containing heat.

Symptoms: All symptoms of *Warm* mentioned above will be manifested, further there will be fever if *Warm* is in liver parenchyma, increased thirst, lack of appetite, hiccup, nausea and vomiting of yellow color followed by *Zanjari* then *Karasi* and *Sauda*, red urine, coldness of periphery, blackening of tongue, syncope. All these signs are found together along with spasm in diaphragm during inspiration especially if *Warm* is in concavity.

If *Warm* is in convexity of liver, there will be dyspnea and pain will be felt in posterior regions extended towards the clavicle. If nature is strong especially of stomach and *Warm* is in concavity there will be retention of materials and constipation. If there is weakness in the body and stomach and *Warm* is in convexity there will be diarrhea.

Ingestion of *Arq Razianaj (Foeniculum vulgare)*, *Arq Badranjboya (Melissa parviflora)* with Sharbat Bazuri

Applying Poultice made with *Zarnab (Abies alba)*, *Razianaj (Badian, Foeniculum vulgare)*, *Sunbul (Nardostachys jatamansi)* and *Mastagi (Pistacia lentiscus)*.¹⁹

Section 15: *Warm Al Kabid (Enlargement/Swelling of liver)*

Swelling of the liver can be found either on convexity or concavity of the liver or the liver as a whole. This swelling according to the causative agents is of various types: *Damwi* (sanguineous), *Falghamuni*, *Safrawi* (bilious), *Balghami* (phlegmatic), *Sulb*, *Saratani*, *Ghair Saratani* and *Rihi*

Some of the *Warm* arise in liver substance itself some in the muscles related to liver and some in mesentery. *Warm* in liver substance either in concavity or convexity or in the capsule or inside the vessels and this is rare.

Types of *Warm* in liver substance: *Falghamuni* (Phlegmon) with abscess formation or without abscess, *Safrawi*, Phlegmatic, *Sulb* (Hard), Malignant.

Causes:

Mostly swelling of liver is hot and caused by prolonged fever, retention of materials in the liver and inability of liver to excrete them.

1. *Sue Mizaj Harr* (Hot abnormal nature), or *Sue Mizaj Barid* (Cold abnormal nature),
2. Digestive and excretory disorders due to coldness, stomach weakness. Any liver *Warm* caused by stomach leads to indigestion,
3. Any *Suddah* (obstruction) that causes retention of humors, if *Suddah* is near gall bladder, the bile gets mixed with blood and copious bile is one of the causes of *Harr Warm*.
4. Heat producing foods, thick and indigestible foods
5. Sometimes power of absorption by liver is increased so large amounts of materials are absorbed in the liver which can not be excreted and cause *Warm*.
6. Trauma or injury²⁰

Symptoms:

1. *Warm* in liver it self:

Heaviness is felt in epigastrium with pain some times, change in the state and color of the body, sometimes sense of pulling of clavicle downwards. Pain in posterior ribs, Difficulty in sleeping on both sides so the patient remains sleeping flat on the back.

Treatment: Useful compound drugs are *Qurs Rewand Chini*, *Majun Rewand Chini*, *Dawa al Kurkum*, *Majun Sudab*, Extract of *Sanobar* leaves, *Majun Jalinus*.

Following prescription is also useful: Rose, *Sunbul (Nardostachys jatamansi)*, *Mastagi (Pistacia lentiscus)*, and Extract of *Ghafis Gentiana olivierii Griseb. (Agrimonia eupatoriā)* and *Afsanteen (Artemisia absinthium Linn.)*, *Luc Maghsool (Cateria lacca)*, *Zafran (Crocus sativus)*, *Izkhar* (Rusa grass *Andropogon shoenantus Linn.*), *Majeeth*, *Asarun (Asarun europium)*, *Uod Balsan (Balsamodendron opobalsamum Linn)*

Pill formulation for evacuation:

Habbun Neel, Habbul ghar (*Laurus nobilis*), *Zafran (Crocus sativus)*, Ghareequn (*Agaricus campestris*), *Rewand Chini* (Rhubarb, *Rheum officianale Baillon.*) (*Rheum emodi*), All these drugs are powdered and made pills with Arq Razianaj, Badian (*Foeniculum vulgare*).

Poultice formulation:

1. *Mur Makki (Commiphora myrrh)*,
2. *Aloe barbadensis (Sibr Saqutri)*,
3. *Sa'd Kufi, (Cyperus rotundus)*
4. *Zafran (Crocus sativus)*,
5. *Mastagi (Pistacia lentiscus)*,
6. *Sunbul (Nardostachys jatamansi)*

All these drugs made into paste and applied as poultice over the liver.

Liver pain with diarrhea: *Sunbul (Nardostachys jatamansi)*, *Rewand Chini (Rhubarb, Rheum Rheum officianale Baillon.) (Rheum emodi)*, *Lac Maghsool (Cateria lacca)* cooked with vinegar, Iron dross, with Coriander juice. Poultice of *Advia Muhallila* is also applied.

Diets: easily digestible foods should be given.

Section 14: Sharqa al Kabid (severe hepatalgia)

It is a type of severe pain of liver which is caused by intake of cold water just after strenuous exercise, empty stomach or after *Hammam* (steam bath).

It is a condition in which a person drinks cold water before break fast or just after hard work or awakening from sleep or after bath, then the water reaches immediately to the liver causing severe pain. If it is not treated properly it may lead to ascites.

Treatment: A cloth absorbed in warm water or rose water is kept on liver, fomentation with common salt wrapped in a cloth and wetted with rose water.

Zamad prepared from Mastagi (*Pistacia lentiscus*), Izkhar (Rusa grass *Andropogon schoenanthus* Linn.), Sunbul (*Nardostachys jatamansi*), Habbul ban (*Melia azedarach*) and ointments prepared from oil of Nardeen (*Nardostachys jatamansi*) and Mastagi (*Pistacia lentiscus*) should also be applied. Consideration of other organs is also essential. if pain is spreading toward intestine, purgative should be used before carminative and if pain is spreading toward diaphragm first diuretics are given.¹⁸

Section 13: Waja al Kabid (Pain in the liver or hepatalgia)

Pain of liver is caused by the intemperament and gaseous distension of membrane covering the liver. It can also be due to acute and chronic hepatitis, traumatic injury of liver, pustules, abscess and calculi of liver.

Causes:

1. Pathological nature of liver or its capsule,
2. Distended flatus or *Sudad*,
3. Acute or chronic inflammation of liver,
4. Liver weakness and nutrients reaching the weak liver causes severe pain,
5. Agitation of humors in *Buhran* (emergency of diseases) due to injury or rupture of liver
6. Swelling hard or benign

Signs:

1. Severe pain with no fever may be due to accumulation of flatus while presence of fever can dissolve these gases.
2. The patient is unable to drink water due to coagulation of fluids in the liver vessels.

It is written in *Risala Qabria* (a book reported to be found in the grave of Hippocrates and attributed to him) that if pain in liver is accompanied with severe itching in palate, behind the head and both toes and appearance of a *Baqila* like papule on the neck, the patient will die within five days and such patient will also suffer from dysuria due to *Suddah* and dribbling of urine due to urinary bladder defect. Symptoms will be produced according to the causes.

Diagnosis: it is very difficult for a physician to differentiate between Colic pain and hepatic pain. The main difference is that hepatic pain is accompanied with whiteness of urine, excessive appetite, edema of the face with no thirst and this pain is shifting nature while colic pain comes with intense thirst, lack of appetite and pain remains at one place. Site of pain is also differs; hepatic pain is felt near anterior ribs while colic pain is felt near posterior ribs. (Jurjani)

AMRAZ KABID (HEPATIC DISORDERS) IN CLASSIC LITERATURE OF UNANI SYSTEM OF MEDICINE

(Part-II)

Dr. Ashfaque Ahmad*

(Continued from the previous issue..)

Section 12: *Nafkh al Kabid, Reeh al Kabid* (Flatus in the liver)

Collection of gaseous matter and thereby their condensation inside the liver parenchyma or in the layer covering the liver causes Nafkh al-Kabid. Condensed vapours could not get dissolved because of their increased amount, obstruction of liver, or thickening of the membrane covering the liver. Sometimes there is accumulation of winds or gas in the liver substance or under its capsule causing retention of these winds as they don't find any passage to escape out due to presence of *Suddah* or its abundance, this is called *Nafkh*.

Symptoms:

1. The patient feels a great distension below the right rib without much heaviness as it is felt in swelling and obstruction and without fever as it occurs in inflammation.
2. Gurgling sound is also produced and site of collection goes on shifting from one place to other.

Causes:

1. Weakness of digestive quality of liver
2. Presence of flatus producing humors or foods.

Treatment: *Advia Mulattifa Muhallila* and *Majun* as mentioned in the Section of *Sudad*.

A bath and light drink in the morning before breakfast is useful. Cold water is avoided. *Takmeed* (Hot fomentation) with cloth is better.

Drugs like emulsion of Razianaj, Badian (*Foeniculum vulgare*), Kasus (*Cuscuta reflexa* Roxb.) seeds, Aneesun (*Pimpinella anisum* Linn), compound drugs like *Jawarish Kamuni*, *Dawa al Misk*, *Arq Nankhwah* (*Ajwain Desi*, *Kamun*, *Trachyspermum amm*) are useful.

सारांश

रसायन एवं मेध्य औषधि 'मा-उज़-ज़हब'
(स्वर्ण निर्मित यूनानी औषधि)
एक चिकित्सीय ऐतिहासिक समीक्षा

अशफ़ाक अहमद एवं अला नारायण

यूनानी चिकित्सा पद्धति की जड़ें बुकरात (४६०-३७७ ई. पूर्व) से मिलती है। यूनानी चिकित्सा ने समकालीन चिकित्सा पद्धति (जो भारत, मिस्र, सीरिया, इराक, ईरान, चीन एवं अन्य मध्य पूर्व देशों में प्रचलित थी) के सर्वश्रेष्ठ विषयों को भी अपने अंदर सम्मिलित किया। यह चिकित्सा पद्धति भारत में अरब द्वारा पहुंची। यूनानी चिकित्सा में रसायन एवं मेध्य रसायन श्रेणी की अधिक औषधियाँ हैं। प्राचीन यूनानी साहित्य में खनिज एवं धातु से चिकित्सा का उपाय वर्णित है, जैसे- लोह, ताँबा, स्वर्ण, रजत, संखिया, पारा इत्यादि। परन्तु इनका क्रियान्वयन अधिक अवधि के बाद हुआ। एक बहुत ही प्रभावशाली शोधकार्य अलीगढ़ मुस्लिम विश्वविद्यालय में हुआ जिसमें एक खनिज औषधि 'स्वर्ण घोल' का अध्ययन किया गया। यह अध्ययन वैज्ञानिकता पूर्वक दर्शाता है कि उपरोक्त औषधि उन रोगों में उपयोगी है, जिनका सम्बन्ध मानसिक तनाव एवं स्मृति क्षय से है। इस लेख में स्वर्ण की विस्तृत चिकित्सीय ऐतिहासिक समीक्षा प्रदान की गई है।