ILAJ AL-ATFAL OF SYED FAZL ALI SHIFAI KHAN

(Part III, Chapter 41-56)

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(Continued from the previous issue..)

Chapter 41: Is'hal (Diarrhea)

Mostly children get affected with diarrhea due to teeth eruption; the learned commentator has also same opinion. The physicians get confused in this condition, if it is stopped retention of the decayed material may be harmful, if it is purged then each day and each moment there is infiltration of decayed material to be expelled, if nothing is done then loose motion may be fatal to the child. Some of the measures adopted which are in between, such as occasionally weak astringent, occasionally weak laxative and mostly the combination of astringent, deobstruent and cooling drugs are used.

The following formulation is tried and more prevalent in my practice.

Ingredients: Bahidana (Cydonia vulgaris, Quince seeds) 1 gm, Flower of Khitmi (Althaea officinalis, Marsh mallow) 1 gm, Khirfa emulsion (Portulaca oleracea, Parselane) 2 gm, Ilaichi (Cardamom) 2 pieces, Zahr Mohra Khatai (Benzoar stone) 1 surkh, Bartang (Plantago major) 2 gm, Kateera (Traga canth) 4 surkh

Drugs 1 and 2 are soaked in 50 gm of *Arq Mako* (*Solanum nigrum*) over night. The infusion is filtered in the morning. Drugs 3-5 are pounded with rose and mixed with the infusion, drugs 6 and 7 are powdered and sprinkled over the compound. This is given to one year child.

If there is blood mixed loose motion then

Kateera (Traga canth) 1 gm is crushed and dissolved in Aab Barg Bartang Sabz Murawwaq (water filtered of fresh leaves of Plantago major) mixed with Kahruba Shamai (Vateria indica) and sprinkled with Bartang is given to drink in the morning, in the evening Bartang boiled mildly in 25 ml of rose water with Zahr Mohra (Benzoar stone) and pearl pounded with rose all mixed together is given to eat.

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Another formulation which I found most effective, its ingredients: Fresh leaves of Mugheelan (Acacia Arabica) 2 gm, Cleaned White Zeera (Cuminum cyminum, Cumin) 2 gm, Reza Jarob (Wild thyme) 2 surkh, Gulnar Dahan Basta (Pomegranate flower 2 gm, Tukhm Khirfa Budadah (seeds Portulaca oleracea, Parselane) 2 gm, Zahr Mohra (Benzoar stone), Bartang 2 gm, Emulsion of drugs 1-5 is taken in Aab Farah (fresh water); drug 6 is pounded with rose and mixed with the emulsion, sprinkled with drug 7 and given internally.

Another formulation: Gul Khitmi (Althaea officinalis) 1-2 gm is soaked in 50 ml water over night, filtered in the morning, added with sugar 1 gm and given to eat.

Another Formulation: A pill made of following drugs is most useful in children to check the diarrhea. Ingredients: *Gulnar Taza Dahan Basta* (unbloomed Pomegranate flower) 12 gm, fresh Mint Dried 12 gm, *Parbini darakht bart*, Roasted Ginger 12 gm, *Khurma Khushk* (Dried Dates) 12 gm, *Khasta Anba Kuhna* (Dried and old mango fruit) 12 gm, Tamarind seeds roasted and peeled 12 gm, *Suhaga* (Borax) roasted 12 gm, *Afyun* (Opium) 1 gm. All these drugs are powdered separately and mixed together thoroughly then kneaded with *Aab Kooknar* (Poppy shell juice) and pills are prepared in the size of peas. Dose: 1-2 pills.

Another Formulation: The powder of following drugs is also beneficial.

Ingredients: Pulp of Bel (Aegle marmelos), Zingiber officinalis, Badian (Fennel), Black Halaila (Terminalia chebula), Amla (Emblica officinalis) cleaned

All these drugs are fried in the oil of almond or cow *ghee* then powdered and added with sugar of equal amount. Dose: 1-2 gm dissolved in the mother milk is given internally.

Other Formulation: Pure *Afyun* (Opium) 1 gm and *Kabab Cheeni* (*Piper cubeba*) 1 gm are finely made paste with water and mustard size pills are prepared and given two times a day.

Another Formulation: Cleaned *Amla* (*Emblica officinalis*) 12 gm is taken and roasted in iron pot mixed with powdered *Post Kooknar* (Poppy shell).

Dose: 1 gm with Dogh Baqri (yogurt) is given.

Other Formulation: A pill made of following drugs is most tried and tested.

Ingredients: Flower buds of Pomegranate fresh 1 gm, Jauzbua (Myristica fragrans, Nutmeg) 1 gm, Pure Afyun (Opium) 1 gm, Chaksu (Cassia absus) 1 gm, Narkachoor (Zingiber zerumbet) 1 gm, White Zeera (Cuminum cyminum, Cumin) cleaned 1 gm, Zard Chob (Turmeric) 1 gm, Flower buds of Semul (Bombax malabaricum) 1 gm, Flower buds of Neem 1 gm, Flower buds of Bakain (Melia azedarach) 1 gm, Flower buds of Babul (Acacia arabica) 1 gm. All these drugs are finely powdered and pills are made in the size of Mung pulse.

Another Formulation: Pulp of Bel (Aegle marmelos) 3 gm, Sod Kufi (Cyperus rotundus) 3 gm, Tabasheer (Bambusa arundinacea) 2 gm, Pomegranate 3 gm, Jamun (Eugenia jambolana) 3 gm, Maveez seeds (cleaned grape) 3 gm, Post Khasakhash (Poppy shell) 6 gm, Pure opium 0.5 gm, Roasted Samagh Arabi (Acacia arabica) 3 gm

Opium is dissolved in water and remaining drugs are crushed and powdered then pills are prepared at the size of Black Pepper. Dose: one pill two times a day.

Another Formulation: this is useful in blood mixed diarrhea.

A semi ripe Soar Pomegranate is taken, its top is scrapped and a hole is made inside and pure opium 1 gm is filled in the hole then the hole is sealed with the clay and roasted in hot ash of the furnace. After ripening it is taken out. The pomegranate with shell and seeds along with all its contents are crushed and made ointment like paste. 12 gm of this paste is mixed with following drugs.

Tabasheer (Bambusa arundinacea) 2 gm, Enjibar (Polygonum bistorta) 2 gm, Damul Akhwain (Dracaena cinnaberi) 2 gm, Kahruba Shamai (Vateria indica) 2 gm, Samagh Arabi (Acacia arabica) 2 gm, Kateera, Qatad (Traga canth) 2 gm, Kat safed (Acacia catechu) 2 gm, Geru, Teen Maghra (Red Chalk, Bole rubra) 2 gm, Huzaz Makki, Rasot (Extract of Berberry, Berberis aristata) 2 gm

All drugs 1-9 are thoroughly mixed with the above pomegranate paste and added with Mucilage of *Bahidana* (*Cydonia vulgaris*, Quince seeds) and pills are prepared in the size of black pepper or *Mung* pulse. Dose: One pill is given to child followed by *Aspghol* (*Plantago ovalis*) and *Bartang* (*Plantago major*) fried in almond oil and added with hot water. Astringents should be avoided as far as possible. Gums of the child regularly observed for teeth eruption as the problems will be resolved once eruption is completed.

I saw on many occasions that relatives lost hope for life of their child due to continuous loose motion and started preparing for burial as the child continues to be in unconsciousness, his neck lies like a ball on one side, blackness of eye turns into whiteness, never suckles the breast despite much effort. However immediately after the teeth erupted like tip of the needle, the child begins to recover and starts suckling the milk well as nothing happened. This story tells us that during the teething period excessive loose motion is not dangerous therefore the use of severe astringent drugs should be avoided.

In this condition some emollient drugs can be used like *Enjibar* root emulsion (*Polygonum bistorta*) 2 gm, *Damul Akhwain* (*Dracaena cinnaberi*) 2 gm, *Kahruba Shamai* (*Vateria indica*) 2 gm, *Kateera*, Qatad (*Traga canth*) 2 gm, *Kat safed* (*Acacia catechu*)

2 gm, Geru, Teen Maghra (Red Chalk, Bole rubra) 2 gm, Tukhm Khasakhash (Poppy seeds) 1 gm, Khirfa seeds emulsion (Portulaca oleracea, Parselane) 2 gm

Note: Sometimes a membrane is overlapping the teeth during teething period, below which the teeth can also be felt so this membrane can be ruptured by a sharp tip of the knife, it gives immense relief. Ripe furuncles are incised and drained out of pus and blood. A tooth of a dog is wrapped in a cloth and hanged around the child of 4-5 month old; it is reported to be helpful for easy eruption of the teeth.

Weak Stomach: Diarrhea which is not caused by teething may be due to weak stomach. The weak stomach caused by excessive feeding of the milk which may exasperate vomiting or loose motion in some children.

Treatment: Reduction of milk feeding. In case of corrupted milk such as *Murzia* is pregnant then *Murzia* is changed.

The following drugs are given to Murzia:

Emulsion of *Badian* (*Foeniculum vulgare*, Fennel) 2 gm, Emulsion of *Eletteria cardamomum* 3 gm, Emulsion of White *Zeera* (*Cuminum cyminum*, Cumin) 2 gm, Water of *Badian* (*Foeniculum vulgare*, Fennel) 84 ml, Water of *Mako* (*Solanum nigrum*) 84 ml, *Sikanjabeen* (Oxymel) 24 ml. The drugs 4-6 are mixed thoroughly and the drugs 1-3 are dissolved in this mixture and given to the *Murzia*.

For weak stomach, the formulation of pills and powder written before, should be used.

Another formulation for weak stomach, Ingredients: *Uood Gharqi* (Eagle wood), Eletteria cardamomum, Post Turanj (Shell of Citrus medica), Post bairun Pista (Pistachio nut shell), Post Sangdana Kharus (Shell of the stone of a cock or pigeon or bird), Dried mint, Mastagi, ILuk al Butum (Pistacia lentiscus), Mur makki ((Commiphora myrrh), Black Zeera (Carum carvi) detoxified, White Zeera (Cuminum cyminum, Cumin), Amla (Emblica officinalis), Sumaq (Rhus coriaria, Sumach), Zarishk (Berberis aristata), Sod Kufi (Cyperus rotundus), Zarnabad (Zingiber zerumbet), Roasted Suhaga (Sodium Borate, Borax), Zingiber officinalis, Red Rose flower, Tabasheer (Bambusa arundinacea). Drugs 1-19 are equally taken, crushed, pounded and fermented in citron juice then pills are prepared like pea size. Dose: one pill dissolved in mother's milk for 4 month old child.

Another formulation: *Uood Gharqi* (Eagle wood) 1 gm, *Eletteria cardamomum* 1 gm, Dried mint 1 gm, *Mastagi, ILuk al Butum* (*Pistacia lentiscus*) 1 gm, *Mur makki* ((*Commiphora myrrh*) 1 gm, *Suddab* (*Ruta grveolens*) leaves 1 gm, Roasted *Suhaga* (Sodium Borate, Borax) 1 gm, *Angozah*, *Hilteet* (Asafoetida) 1/2 gm, *Paneer Maya Khargosh* (Rabbit Rennet)

1 gm, Rose filaments. All these drugs are crushed, powdered and made paste with ginger juice then pills in the sizes of pea are prepared.

Twisted shape of the intestine: Sometimes the child may fall from the elevations like cot or cradle which may cause contortion of the intestine. The symptoms: that child remains in restless condition, suffers from diarrhea and undigested milk comes out of the mouth which is sour smelling.

Treatment: No drug becomes effective. Manipulation of the twisted shape of intestine is the choice.

Method: Suppose you are an assisting person, you sit down extending both your legs, the child is rolled over your legs in a manner that child's head is toward your knee, his both legs are directed toward your stomach, the child is facing toward sky, at that time both forelegs of the child are held with your hand and raised up so that his head becomes downward, both his toes toward sky, his back towards you and his face directed downward. In this manner the child is suspended and exhausted then he is made again to lie down on your leg and sleep.

Next step is to adhere child's head to your stomach, his both legs directed toward your legs, his back toward sky then the child is held by entering your hand through his axillae and raised up, so that both his legs are suspended and he becomes a little exhausted. Again the child is lied down on your legs as in earlier method. This process in that manner is repeated three times and very quickly for three days. It should be done on Saturday or Sunday. Some women believe this to be effective, because faith also has a role in drug action.

Other method: A cot is weaved of Musk Willow fibers. Ropes which are stretched in the lower parts of the cot are loosened on Sunday or Monday. The child is slept in a sheet two persons hold firmly all four corners of this sheet and A band of the sheet is worn around the belly of the infant until the navel has healed. While it is completed in three times, the child is fed with milk and made to sleep on the bed. it is the habit of women to hold the sheet in two halves, two persons the mother and his daughter should hold the sheet even they are stranger to the child, if they are real mother and sister of the child it is better. After completion of this process and correction of the twisting of intestine, loose motion of sour and thin liquid are stopped.

Then child is given these drugs for strengthening of the stomach: Waj Khorasani (Acorus calamus) burnt 1 gm, Roasted Suhaga (Sodium Borate, Borax) 1 gm, White Zeera (Cuminum

cyminum, Cumin) peeled 2 gm, Pomegranate flower 2 gm, Above drugs are made emulsion in the Water of *Khiar Shanbar* (*Casia fistula*) or in mother's milk added with pounded *Zahr Mohra Khatai* (Benzoar stone) 1 gm and given to the child. *Waj Khorasani* (*Acorus calamus*) burnt 1 gm and Roasted *Suhaga* (Sodium Borate, Borax) 1 gm are also sufficient.

Chapter: 42: E'tegal (Constipation)

The Child may suffer from the constipation due to the dominance of moisture or stoppage of bile flow in the intestine from gall bladder.

Treatment:

Zahra Gao (Bile of Cow) and Bakhoor Maryam, Hatha Jodi (Cyclamen or Heliotrope) is mixed with olive oil or butter with warm water and massaged over the abdomen by stretching hand swiftly toward umbilicus and pelvis from the stomach. If this is not sufficient then suppository is used. Best suppository is made of rat dung and soap which is quickly effective like the suppository made of red sugar and soap or with honey if it is added with the mint and Sosan (Iris ensata) crushed and burnt it becomes very potent.

Advantage: Whatever described abut anointing and use of suppositories is about the constipation which is not accompanied with fever. If there is fever then no oil massage or the use of suppository.

The drugs which are beneficial in the constipation with fever:

Suppository made of *Banafsha* (Viola odorata) crushed and added with sugar is used, if it is not sufficient then suppository made of following drugs are used:

Banafsha (Viola odorata) flower 11 gm, Khitmi (Althaea officinalis) 7 gm, Senna makki (Cassia angustifolia) 18 gm, Namak Sang (Rock Salt) 4 gm, Red Sugar 25 gm, Pulp of Cassia fistula 25 gm. Pulp of Cassia fistula dissolved in rose water, made paste and applied warm over the abdomen as poultice, is also beneficial.

Warning: If constipation is not removed by the use of all suppositories, liniments and oiling, then proper laxatives according to the need should be used as the constipation is one of the worst diseases.

The drugs most useful in children constipation: Badian (Foeniculum vulgare, Fennel) peeled 2 gm, Khuskdana (Carthamus tinctorius) pulp 1 gm, Black Zeera (Carum carvi) 1 gm, White Zeera (Cuminum cyminum, Cumin) 1 gm, Heel (Cardamom) 1 gm, Waj Turki (Acorus calamus) 1 gm, Aneesun (Pimpinella anisum) 1 gm

These drugs are crushed and pounded in *Badian* juice like paste then castor oil 2 gm are added and mixed thoroughly, 4 ml oil are added daily for 7 days, then 4 ml are reduced from 8th day onward daily till 14th day it becomes 2 gm only. This formulation is very much useful and tested in colic pain of abdomen and constipation.

Another formula: Waj Turki (Acorus calamus) 2 gm, Senna makki (Cassia angustifolia) 2 gm, Sibr Saqutri (Aloe barbadensis) 2 gm, Black Haleela (Terminalia chebula, Myrobolan) each 2 gm, Rind of Kabuli Haleela 2 gm, Shahm Hanzal (Colocynth) 1 gm, Red Rose 2 gm, Kateera, Qatad (Traga canth) 1 gm. All these drugs are crushed and powdered, kept preserved. Dose: 4 mg dissolved in mother's milk.

Another formula: Dried Mint, Khas (Lactuca sativa), Asarun (Asarun europaeum), Sod Kufi (Cyperus rotundus), Waj Turki (Acorus calamus) 2 gm, Zanjabeel (Zingiber officinalis) 2 gm, Black Haleela (Terminalia chebula, Myrobolan) 2 gm, Rind of Kabuli Haleela 2 gm, Muqil Azraq (Commiphora mukul) 2 gm, Turbud Safed (Ipoemea turpethum) 6 gm, Black Salt 4 gm

All these drugs are crushed, powdered finely and preserved. Dose: 1 gm for 1 year child.

Chapter 43: Maghs (Spasm of the abdomen)

The tongue is passed over the abdomen of the child from lower part to the upper end and vice versa then from left to right and vice versa. It is very much useful and should be repeated three times each side. The person who licks should be young and healthy, it is better if child's mother does.

Useful Drugs in cramp: Black Zeera (Carum carvi) 1 gm, White Zeera (Cuminum cyminum, Cumin) 1 gm, Tukhm Kardia 1 gm, Aneesun (Pimpinella anisum) 1 gm, Black Haleela (Terminalia chebula, Myrobolan) 2 gm, Rind of Kabuli Haleela 2 gm, Heel (Cardamom), Seeds of Gandana (Allium ascalonicum, Shallot), Tabasheer (Bambusa arundinacea), Mastagi (Pistacia lentiscus), Amla (Emblica officinalis)

All these drugs are roasted in almond oil, added with *Habbur Rashad* and powdered. Dose: 2 gm powder with the juice of Fennel or Cardamom for 2 years old child.

Another formula: White Zeera (Cuminum cyminum, Cumin) detoxified, Nankhwah (Trachyspermum ammi), Darchini (Cinnamom), Dried Mint, Mastagi (Pistacia lentiscus)

All these drugs taken 1 gm each and boiled in 75 ml water till the water reduces to 50 ml, it is cooled and filtered and added with the paste of *Haleela* (*Terminalia chebula*) 3 gm and it is given to the child.

Another formula: Zeera Siah (Carum carvi) 1 gm, White Zeera (Cuminum cyminum, Cumin) 1 gm, Tukhm Kardia, Heel (Cardamom) 1 gm, Aneesun (Pimpinella anisum) 1 gm, Karafs (Apium graveolens) seeds 1 gm, Badian (Foeniculum vulgare, Fennel) 1 gm

All these drugs are crushed and made paste with juice of *Badian*, added with castor oil 12 ml given to 2 year old child with warm milk.

Another formulation which I found most effective, its ingredients: Fresh leaves of Mugheelan (Acacia Arabica) 2 gm, Cleaned White Zeera (Cuminum cyminum, Cumin) 2 gm, Reza Jarob (Wild thyme) 2 surkh, Gulnar Dahan Basta (Pomegranate flower 2 gm, Tukhm Khirfa Budadah (seeds Portulaca oleracea, Parselane) 2 gm, Zahr Mohra (Benzoar stone), Bartang 2 gm, Emulsion of drugs 1-5 is taken in Aab Farah (fresh water); drug 6 is pounded with rose and mixed with the emulsion, sprinkled with drug 7 and given internally.

Another formulation: *Gul Khitmi (Althaea officinalis)* 1-2 gm is soaked in 50 ml water over night, filtered in the morning, added with sugar 1 gm and given to eat.

Another formula: Agar Gharqi (Eagle wood) 1 gm, Zarnabad (Zingiber zerumbet) 1 gm, Mastagi (Pistacia lentiscus) 1 gm, Nankhwah (Trachyspermum ammi) 1 gm, Black Zeera (Carum carvi) 1 gm, Dried Mint 1 gm, Khuskdana (Carthamus tinctorius) 1 gm. All these drugs crushed and boiled in the juice of Badian and Cardamom 50 ml each till the juices reduce to half then it is cooled, filtered and added with the syrup of Zarishk or Deenar or Gul qand 3 gm and given to the child.

Another formula: Badian (Foeniculum vulgare, Fennel) 1 gm, Heel (Cardamom) 1 gm, Poppy seeds, Seeds of Kasni (Cichorium intybus, chicory), Seeds of Khiar (Cucumis sativus, Cucumber), Seeds of Kharpaza (Cucumis melo, Musk Melon), Filfil Gard (Piper nigrum), Qinnab, Bhang (Cannabis sativa) 2 rice

All these drugs are crushed and made paste with 25 ml of water, given to 2 year old child.

A very soft and warm cloth called *Fulalen* is folded two layers and kept over the abdomen and may be wrapped with other cloths, it is much useful.

Another formula:

Barg Shibbat (green dill) is wrapped in a cloth as a bundle, heated and fomented. Egg white mixed with Nankhwah (Trachyspermum ammi) is also applied over the abdomen.

Fomentation with fresh warm dung of the cow is also beneficial. Suppositories made of soap, rat dung, Satar Farsi (Zataria multifloria) or Samagh Arabi (Acacia arabica) with egg yolk mixed together have beneficial effects.

Murzia should keep the child lied on her abdomen and keep moving gently and also massage his back which is much useful.

Also: Jaoras, Bajra (Italian Millet) and Naushadar wrapped in a cloth as a bundle, heated and fomented over the abdomen.

Also: Namak Siah (Black Salt) dissolved in ginger juice, added with a little Angozah (Asafoetida) heated and applied below the umbilicus then washed with warm water.

Following pills are useful in cramps.

Ingredients: Muqil Azraq (Commiphora mukul) 25 gm, Rind of Baleela (Terminalia belerica) 3 gm, Black Haleela (Terminalia chebula, Myrobolan) 3 gm, Rind of Yellow Haleela 3 gm, Rind of Kabuli Haleela 3 gm, Black Zeera (Carum carvi) 3 gm, Zingiber officinalis 3 gm, Piper longum 3 gm, Piper nigrum 3 gm, Seeds of Gandana (Allium ascalonicum, Shallot) 3 gm, Amla (Emblica officinalis) 3 gm. Drug no 1 is dissolved in 72 ml water of Gandana (Allium ascalonicum, Shallot) then filtered by a cloth. Drugs 2-4 are fried in almond oil and crushed, drugs 5-11 are crushed and powdered, then all drugs are mixed together to make a paste and pills are made in the size of black pepper. Dose: one pill each day.

Another formula: Sibr Saqutri (Aloe barbadensis) 1 gm, Clove 1 gm, Suddab (Ruta grveolens) leaves 1 gm. All these drugs are crushed and pounded in the juice of Leaves of Kakronda (Blumea balsamifera) like paste and pills are made in the size of Mash pulse.

Another formula: Useful formula of castor oil for the cramp caused by wind or phlegm, Ingredients: Ginger juice 25 ml, Fresh green Mint juice 25 ml, Juice of *Suddab* (*Ruta grveolens*) leaves 12 gm, Pulp of Aloe plant, Fresh Castor oil 120 ml

All above drugs are boiled till only oil is spared it is preserved in the glass bottle. Dose: 3 ml oil with the paste of *Badian* (*Foeniculum vulgare*, Fennel) 2 gm is given to the child.

Warning: Sometimes cramps lead to the intestinal obstruction; in this condition *Bartang* (*Plantago major*) 2 gm and Cardamom 1 gm are boiled and given to drink. Aspogel fried in almond oil dissolved in hot water or juice of Fennel or *Arq Gaozaban* (*Borago officinalis*) is administered till obstruction is removed. After removal of obstruction if pain still persists then deobstruent drugs like Black *Zeera* (Carum carvi) 1 gm, White *Zeera* (*Cuminum cyminum*, Cumin) 1 gm, Cardamom 1 gm, *Aneesun* (*Pimpinella anisum*) 1 gm are given. The condition of *Murzia* should be observed and her diets should contain soup, dry fruits and cooked rice.

If there is a complaint of flalutance or intestinal sound, *Jawarish Kamuni* or deobstruent emulsions are used.

Chapter, 44: Su-Al-Qinya (Pre-Ascitic State, Cacochymia, Anaemia)

It is caused by hepatic insufficiency which is the preface of the Ascites. It occurs in children mostly due to coldness and moistness.

Signs: Initially body color turns into pale whitish and sclera become turbid, there is edema around the eye and finally swelling in the periphery and the skin, Distraction from the food and milk, eye is closed that appears like the child is sleeping. Redness below the finger nail is abolished. This disease called *Safeda* by the people of Great city of Hyderabad.

Treatment: Removal of the obstruction in the liver and mesentery canal by use of diuretics followed by liver tonics. The drugs tested and tried by our experts in this condition are written here. Decoction which is most beneficial: Badian (Foeniculum vulgare, Fennel) seeds and roots 2 gm each, Kasni (Cichorium intybus, chicory) Seeds and roots 2 gm each, Mako (Solanum nigrum) seeds and roots 2 gm each, Roots of Biskhapra (Trianthema portulacastrum) red and white 2 gm each, Bao Badang Kabuli (Embelia ribes) 1 gm, Maveez Munaqqa 3 gm, Seeds of Kharpaza (Cucumis melo, Musk Melon) crushed 2 gm. All these drugs are soaked in 72 ml water of Fennel and 72 ml water of Mako (Solanum nigrum) overnight, boiled in the morning till water is reduced to one third, dissolved in 3 gm of syrup Zarishk and given to the child in the morning.

In the evening following powders are given,

Ingredients: Kutki (Gentiana kurroo), Bao Badang (Embelia ribes) 3 gm, Bai Kanbha (Careya arborea) 3 gm, Filfilmoya (root of long pepper) 1 gm, Badian (Foeniculum vulgare, Fennel) 3 gm, Suhaga (Borax) 1 gm, Kali Zeeri (Centrathema anthelminticum, Kuntz) 3 gm, Mur makki ((Commiphora myrrh), Ajwain Desi, Kamun (Trachyspermum ammi)

All drugs are crushed and powdered together. Dose: 1 gm with warm water is given.

Another formula:

Talmakhana (Asteracantha longifolia) and Charchara are burnt into ash separately and preserved then it is dissolved in water, after precipitation the water is taken out and given to the child two times a day. It is very much useful.

Another tested and tried drug which may cause loose motion but still it is beneficial because lose motion in *Safeda* disease is not desired. Ingredients: *Suddab* (Ruta grveolens) leaves 3 pieces, Leaves of *Karela* (*Momordica charantia*, Bitter Gourd) 3 pieces, White betel leaves, one piece, *Nankhwah* (*Trachyspermum ammi*) 25 grains, Clove, Piper longum, Garlic peeled 1 piece (left inside the hot ash and taken), *Waj Turki* (*Acorus calamus*) 1 gm, A heavy house fly with head and both legs cut

All these drugs are pounded together in mother's milk or *Arq Gaozaban* (Borago officinalis) and given to the child. One house fly is added each day for 7 or 14 days. After that, complete recovery occurs. *Murzia* should avoid the oily and sour foods and drink the juice of *Mako* in place of water. *Kalkanaj* is beneficial to the mother and child.

Other formula: Kali Zeeri (Centrathema anthelminticum, Kuntz) 3 gm, Kutki (Gentiana kurroo), White Zeera (Cuminum cyminum, Cumin), Karanjwah (Caesalpinia bonducella) All above drugs 250 gm each is taken and soaked in 3 liter water overnight, in the morning, two kg Arq is obtained by distillation process.

Other formula: Kali Zeeri (Centrathema anthelminticum, Kuntz) 250 gm, Kutki (Gentiana kurroo) 250 gm, Ajwain Desi, Kamun (Trachyspermum ammi) 250 gm, Filfilmoya (root of long pepper) 250 gm, Roots of Biskhapra (Trianthema portulacastrum) white 250 gm, Talmakhana (Asteracantha longifolia) 2 kg, Badian (Foeniculum vulgare, Fennel) root 250 gm, Kasni (Cichorium intybus, chicory) roots 250 gm

All above drugs soaked in 6 litre water overnight, in the morning 4 kg *Arq* is obtained by distillation process.

Other formula:

Leaves of *Ricinus communis* fresh 1-3 gm is crushed and juice is taken, a very small part of garlic wrapped in wet cloth is kept inside the hot ash added with a little *Gae Rohan*, then both parts are taken out and smashed with the above juice of castor, it is given internally followed by cow's milk. After that, whenever the child feels hunger, fine rice cooked well in cow's milk is given to eat. The preferable diet for the child is milk and dry fruit. Sweet and salt should never be given as they are like poison. Milk is boiled in simmer fire then cream is taken out, creamless milk is filtered by cloth and preserved. The milk should be given as much as the child can digest. Roasted salt is started little by little forty days after complete recovery and stoppage of all drugs.

Note: Some children are not healthy in one or two years of age and they become emaciated day by day, they keep their eyes closed as looks like taking a nap while there is no nap, both ear lobes are so thin that lights may pass through it and it is so cold as it was kept in a cold storage, their eye lashes may be elongated. Some children get loose motion and besides this, some have edema of the skin and periphery, it is named *MuBariki* by Indian women. This disease is cured by diuretic and deobstruent drugs which indicates that its main cause is hepatic weakness, it may be acute or chronic.

Treatment becomes much effective by giving due consideration to the heat and cold nature of the disease after complete investigation. Some children were completely cured after they were given house flies for 14 days.

The Process: One fly, as mentioned above is taken and with 250 mg *Nankhwah* (*Trachyspermum ammi*) is wrapped in one piece of white betel leaf with spices then all is pounded and emulsion is taken in the stone vessel and given to eat, it is added by one fly and a little *Nankhwah* each day till it becomes 14 flies and one gm *Nankhwah* on 14th days, then gradually it is reduced by one fly and little *Nankhwah* each day till it reaches to one fly and 250 mg *Nankhwah* on last day. It leads to complete recovery and health. If still some disease remains, rest for 7-10 days is taken then the formulation of *Sangtab* written for the patient of *Safeda* is used which acts like a panacea. On Saturday or Sunday, a little wheat is soaked over night after softening in the morning wheat is pierced by a needle and attached in a thread and four strings are prepared. Two strings around the both wrist and other two are suspended around the neck. There is no harm with possibilities of some gain. This formulation of *Sangtab* written in *Su Al Qinya* is much beneficial,

Ingredients: Bekh Aakola (Root of Asafoetida tree) 4 gm, Bao Badang Kabuli (Embelia ribes root) 2 gm, Bai Kanbha (Careya arborea) 2 gm, Suddab (Ruta grveolens) leaves 3 pieces, Leaves of Karela (Momordica charantia, Bitter Gourd) 2 small piece, White betel leaves, one piece, Nankhwah (Trachyspermum ammi) 1 gm, Clove, Piper longum, Garlic peeled 1 piece (left inside the hot ash and taken), Waj Turki (Acorus calamus) 1 gm, Rind of roots of Biskhapra (Trianthema portulacastrum) white 2 gm, Piper longum 1 gm, Gai Rohan, Magas (House Fly) 1 piece

All these drugs are crushed and made paste with the juice of *Mako* or *Badian* and given to eat. One fly is added each day for 14 days then one fly is reduced each day till it reaches to one fly, it is much beneficial in diarrhea, swelling of the periphery and extreme weakness of the child.

Warning: Eye lashes may be elongated in this disease. Extra long hair should be scrapped by the scissor as it is the act of *Totka* which is supposed to be magical protection against the disease or evil.

Other Formulation: Fresh root of *Shaitraj* (*Plumbago zeylanica*) is taken and made paste. Four series of thread are spun and polluted with this paste. It is tied on both arms and both legs then blister may appear on both arms and legs. The more matter passed out by these blisters, it is the better.

Jaundice:

It is two types: Yellow and black. Majority of children suffer from yellow jaundice, because their nature is far from the combustion and *Sauda* (Black Bile).

In Jaundice diuresis and then removal of obstruction is tried. If there is no cough then filtered water extract of green *Kasni* (*Cichorium intybus*, chicory) or hot or moderate oxymel is given.

This Naqu (Infusion) is very much tried and used, Ingredients: Badian (Foeniculum vulgare, Fennel) seeds and roots 2 gm, Ancesun (Pimpinella anisum) 1 gm, Kasni (Cichorium intybus, chicory) seeds and roots 3 gm, Karafs (Apium graveolens) seeds 1 gm, Seeds of Kharpaza (Cucumis melo, Musk Melon) 2 gm, Seeds of Khiar (Cucumis sativus, Cucumber) 3 gm, Seeds of Kasus (Cuscuta reflexa) 2 gm, Mako (Solanum nigrum) 2 gm, Persioshan (Adiantum capillus) 2 gm, Maveez Munaqa, Bao Badang Kabuli (Embelia ribes) 1 gm, Revand Cheeni (Rheum emodi) 2 gm

All these drugs are soaked in the filtered juice of green Kasni (Cichorium intybus, chicory) over night and boiled in the morning then added with the Sheera Dana Heel (emulsion of cardamom), Sheera Zeera Safaid (Cuminum cyminum, Cumin) 1 gm, Sharbat Zarishk (Berberis aristata) 6 ml and Khaksi (Sisymbrium irio) 2 gm, after filtering it is given to drink for some days, it removes the obstruction and causes diuresis, In case of hot nature of child, boiling should be avoided.

In case of no improvement, following laxative drugs should be given for 2-3 days followed by above decoction.

Ingredients: Senna makki (Cassia angustifolia) 18 gm, Pulp of Cassia fistula, Sheer Khisht (Fraxinous ornus),, Gul Qand (Rose Preserve), Almond oil

Prescription of cooling (*Tabreed*) for diuresis and removal of obstruction:

White Zeera (Cuminum cyminum, Cumin) 1 gm, Cardamom 1 gm, Aneesun (Pimpinella anisum) 1 gm, Karafs (Apium graveolens) seeds 1 gm, Khuskdana (Carthamus tinctorius) 1 gm, Seeds of Kasni (Cichorium intybus, chicory) 2 gm, Seeds of Khiar (Cucumis sativus, Cucumber) 3 gm, Seeds of Kharpaza (Cucumis melo, Musk Melon) 3 gm, Kakanj (Physalis alkakenji) 1 gm. All these drugs crushed and made paste in the juice of Kasni (Cichorium intybus, chicory) and Mako (Solanum nigrum) 36 ml each and added with the Sharbat Zarishk or Deenar or Sikanjabeen 3 gm and given to the child.

Extremely valuable drug for child of 4-5 years old:

Lower part of a *Naishakar* (cane sugar) is cut down and wrapped in a cloth then it is left in the hot ash to be heated then it is taken out and given to the child to suck after peeling.

Another Formulation: *Barg Anjeer Taza* (Fresh leaves of *Ficus carica*) 3 pieces and White *Zeera* (Cuminum cyminum, Cumin) peeled 1 gm are crushed together and made paste then given to the child for 3-7 days before breakfast, no food except rice is allowed and oil fully should be avoided.

Another Formulation: Badian (Foeniculum vulgare, Fennel) peeled 2 gm, Khuskdana (Carthamus tinctorius) pulp 2 gm, Khar Khasak (Tribulus terrestris) 2 gm, White Zeera (Cuminum cyminum, Cumin) 2 gm, Cardamom 2 gm, Leaves of Sika Kai 5 gm

All above drugs are crushed and made paste in the juice of *Mako* (*Solanum nigrum*) 36 ml each and given to the child. Sour from leaves of *Sika Kai*, water of *Tuar* pulse, spices like garlic, *Zeera* (Cumin) dry coriander, onion and salt is given with *Khushka* (Boiled Rice) is also beneficial.

Sharbat Deenar with Aab Kasni Sabz also removes the obstruction and helpful in Safravi Fever. Ingredients: Aslus Sus (Liquorice) peeled 30 Misqal, Badian Root and seeds (Foeniculum vulgare, Fennel) 30 Misqal, Karafs (Apium graveolens) Root and seeds 20 Misqal, Root of Kasni (Cichorium intybus, chicory) 20 Misqal, Fuqah Izkhar (a bud of Andropogon schoenanthus) 10 Misqal, Red Rose 10 Misqal, Aneesun (Pimpinella anisum), Tukhm Karafs, Badian, each 4 Misqal, Revand Cheeni (Rheum emodi) 5 Misqal, Seeds of Kasus (Cuscuta reflexa) 10 Misqal, Zafran (Saffaron) 2 Misqal, Arq Afsanteen (Distilled water of Artemisia absinthium), Arq Kasni (Distilled water of Cichorium intybus, chicory), Arq Gaozaban (Distilled water of Borago officinalis)

The drugs 1-10 are coarsely powdered and boiled together in the drug 11-13, the decoction is filtered, and *Nabat Safaid* 4 *Ratal* and *Asl Musaffa* one *Ratal* is added to make syrup.

Sharbat Zarishk Bazoori is also beneficial, Ingredients:

Aslus Sus (Liquorice) peeled 30 gm, Badian (Foeniculum vulgare, Fennel) Root and seeds 30 gm, Karafs (Apium graveolens) Root and seeds 20 gm, Root of Kasni (Cichorium intybus, chicory) and seeds 20 gm, Izkhar (Andropogon schoenanthus) roots, Red Rose, Aneesun (Pimpinella anisum) 1 gm, Revand Cheeni (Rheum emodi) 2 gm, Seeds of Kasus (Cuscuta reflexa) 10 gm, Cardamom 2 gm, Ginger 2 gm, Seeds of Kharpaza (Cucumis melo, Musk Melon) 2 gm, Seeds of Khiar (Cucumis sativus, Cucumber) 3 gm, Bao Badang Kabuli (Embelia ribes) 1 gm, Bekh Kunair (Root of oleander), Zarishk (Berberis aristata) 10 gm, Bahidana (Cydonia vulgaris) 10 gm

All above drugs are used to make syrup with Nabat Safaid 4 Ratal as mentioned above.

Chapter 45: Aam Bad (Pale condition of the body)

This is a type of disease, in which the color of the body becomes pale like a mango. It is one of the hepatic diseases which occur in the children who indulge in eating the clay or mud that may cause obstruction in the mesentery and other alimentary tract which may lead to the loss of appetite and mass edema.

Once a seven year old child came to me with his inflamed joints he started loose motion, his color was pale like mango. I told his father that he is swallowing clay regularly that has lead to this disease his father astonished how it is possible that he has eaten so much clay that resulted in this condition and we never noticed. I said that no drug will be given for 2-3 days till after complete observation whether he eats the mud or not. Ultimately he took his child to his home and complained to his neighbors that due attention was not given by me. Incidentally after 2-4 hours the child went to the toilet, his mother was looking secretly that his child is scratching the wall mud and eating it, she immediately called her husband to see and told him that the physician was right. Now it is proved that he is eating clay. His father came to me and fell on my feet and said you are right, his mother herself has seen in the toilet that he is eating clay of the wall. At that time I had written a formulation and with all the drugs I had prepared a compound drug at my home and gave him to eat. He got cured completely.

I used this preparation in some other patients also, and found very much effective, if death was not predestined. Thousand of other children and young men were given this drug and their bad habit was removed, appetite was restored and skin color turned red from pale.

Ingredients of the formulation:

Cream is separated from the fresh milk and ferment is added to curdle the milk then curd is filtered through a cloth, added with Jaggary and thoroughly mixed. Thamar Mugheelan, Babul (Dried fruit of Acacia Arabica) fruit 2 gm. Khubth al-Hadeed (Iron rust), Barley crushed 2 gm and Iron, 100 gm. Iron in the curd affects the adjacent substances. The vessel should be taken in which water is not permeated. For this purpose much used clay pot may be taken. Curd smashed well with red sugar is poured in the vessel, the drugs 2-5 are also kept inside the vessel and its mouth is sealed. A pit is dug in the soil and one yard is filled with the dung of horse, the vessel is placed over the dung, the dung is spread around the vessel. The pit is filled with the mud in that manner, that the vessel mouth is protruding above the earth, because in this condition, the drugs can be observed by opening the lid if needed. The content of the vessel should be kept empty by m after placing the

drugs inside so that within 7-10 days when boiling starts it may raise up to the mouth. The vessel is taken out of the pit when boiling is subsided after reaching its extreme. The drug should be preserved.

Dose: 72 gm is given to six years old child each morning followed by one piece of bread spread with cream. It should be started with 25 gm it can be increased upto 50 gm if tolerated. According to the age the dose should be adjusted by the physician. If the drug is much thick it should be mixed with warm water and well shaken to make it thin. This drug may cause black or green loose motion in some person which is beneficial so it should not be worried.

Warning: After ingestion of this drug some persons may have complaints like starvation and restlessness due to spasm of the epigastrium, at that time dried grapes or figs or dry fruits like almond, pistachio added with little sugar can be given to eat till complete relief is achieved if need arises Pastry and bread spread by butter or *ghee* also can be given.

Chapter 46: Nutu al-Surra (Umbilical Protrusion)

Umbilicus is protruded outward (bulged). Causes:

- 1. It may be caused by the mismanagement of the umbilicus by midwife at the time of birth. Immediately after delivery it can be rectified by drugs, but when it stabilizes, drugs become ineffective.
- Peritoneal Rupture due to over crying and shouting or due to collection of phlegm, accumulation of wind, growth of extra flesh in the umbilicus subcutaneously or rupture of blood vessels may cause blood accumulation in that place.

Treatment: The treatments described in the chapter of Hernia should be adopted. Flatulence producing agents should be avoided. A piece of heavy lead (*Usrub*) or a bag filled up with powdered antimony (collyrium) or filing of lead is placed over it and bandaged, it gives complete relief. Carminatives are used internally and externally to remove the flatus. Bandaging with a bag filled up with powdered *Badian* (*Foeniculum vulgare*, Fennel) is also beneficial. It reduces the hunger and use of carminative.

Application of resolving paste removes the phlegmatic fluids it makes the touch very soft. Best resolving drugs are: *Sod Kufi (Cyperus rotundus*), *Aard Jau* (Barley flour), *Sirgeen Gao* (Cow dung) and *Pushk Gosfand* (Goat dung)

All these are mixed together and applied as poultice.

Growth of extra flesh never be touched because it needs to be surgically removed which may be risky. This type of hernia is hard and not reducible. If there is a rupture of the

vessels or opening of vessel's mouth blood letting is done by applying the leech followed by the application of astringent paste to stop the bleeding. This type of Hernia is soft with violet or black color due to collection of the blood. Swelling in the umbilicus may occur at the time of cutting due to weakness, as other organs may undergo swelling at the time of injury.

Treatment: Shangar (Ratanjot), Sesame oil and ILak al Butum (Pistacia lentiscus) are anointed over the navel and a little amount is given to the child. Shangar is a plant named also as Abu Khalsa, Kas al-Himar and Fanjyosh.

Another formula:

Murdar Sang (Mono Oxide of Lead, Litharge) and Asfedaj (Plumbi Carbonas, White Lead) are pounded with the water extract of Mako (Solanum nigrum) or coriander, made paste and applied as poultice around the navel.

Another Mujarrab (experimented) ointment, Ingredients are: Leaves of Neem (Azadarachta indica), Leaves of Anar (Punica granatum), Leaves of Kapas (Gossypium herbaceum), Leaves of Jauz Sarv, Cypress tree (Cupressus sempervirens), Leaves of Konar (Lotus), Leaves of Babul (Acacia Arabica), Leaves of Aas (Myrtus cmmunis), Leaves of Seb (Apple), Atraf Tar dar Hashish, Julneem, (Bampat tez), Leaves of Sanbhalu (Semul), Leaves of Arand (Ricinus communis), Leaves of Bakain (Melia azedarach), Leaves of Aamla (Emblica officinalis), Leaves of Tmar Hindi (Tamarindus indica), Leaves of Kamarakh (Averrhoa carambola), Leaves of Khirfa (Portulaca oleracea), Leaves of Dhak (Butea frondosa), Leaves of Tuar (Cajanus indicus), and Leaves of Turanj (Citrus medica)

All above drugs are taken in equal amount, crushed, mixed together and tablets are made. The tablets are burnt in the oil of rose or sesame, the burnt tablets are taken out and oil is boiled with yellow wax 12 gm and grape vinegar 24 gm then oil is filtered through a cloth and preserved. Few drops of it are instilled each day.

Suppuration of Umbilicus (*Taqayyuh*): Sometimes umbilicus is suppurated and pus is formed inside with red area around the navel.

Treatment: Use of dusting powder, Ingredients: *Murdar Sang* (Mono Oxide of Lead, Litharge), *Suranj, Sendur* (Red Lead), *Ghubar al-Ruha* (Dust of mill), and *Sang Jarahat* (Hydrated Magnesium Silicate, Soap Stone). They are powdered finely and sprinkled.

Another Formulation: Sandal Surkh (Pterocarpus santalinus), Jadwar (Delphinium denudatum), and Huzaz (Berberis aristata). These are pounded in coriander juice and applied as Tila around the navel.

If this is not beneficial and the child is more than 2 months old, blood letting is done by applying leech around the umbilicus, then powders are sprinkled but leeching on the abdomen may weaken the stomach so bandage of lead particle (*Usrub*) is best option in place of leaching which cures old injuries.

A child was suffering from this disease for one year, got complete reduction by leeching, he suffered again and no drug was effective, finally I gave him the powder of *Murdar sang* and *Sendur* to be put on the wound, the round piece of *Usrub* was placed and bandaged over it. He got cured with in 2 weeks without recurrence.

Advantage: *Marham Siah, Marham Shaljam, Marham Sandal* used by our experts are more tried in this disease, their ingredients are written in the last.

Chapter 47: Fataq wa Qeel (Hernia and Hydrocele)

Fataq has two meanings by the physicians:

First: Both inguinal canals above the testes are dilated, the contents from above enter through this canal inside the scrotum. This type of Hernia occurs mostly in children due to their humid nature, weakness of nerve and they intensely roam here and there. This is also called *Qeel* (hydrocele) or enterocele depending upon the nature of contents. The descended material into the scrotum may be air, water, omentum with or without intestine or intestine only. But intestine can not descend and enter till the omentum is ruptured. Hernia is named according to the nature of entering object, like physocele, hydrocele, omentocele, enterocele. Hydrocele rarely occurs in children.

Second: Peritoneum is ruptured, *Fataq* literally means to rupture. If peritoneum around the umbilicus is ruptured and covering of abdomen is safe then omentum is ascended from that place, it is called *Fataq Muraq Al-Batan* (Hernia of the hypochondria). If it descends through inguinal canal in the groin it is called inguinal hernia (*Maraq Al-Urbia*), if it enters the scrotum it is called '*Qeef*' because '*Qeef*' is named descent of any object into the scrotum either due to dilatation of the both inguinal canal or rupture of the peritoneum.

There are 3 coverings of the abdomen:

- 1. Skin of the abdomen which is called Maraq (Soft of the belly).
- 2. Safaq (Peritoneum) it is below the skin and above the omentum it covers all parts of the abdomen collected in the groin and secures the testes.
- 3. *Tharab* (Omentum, A fold of peritoneum supporting the viscera), this fatty object is adherent to all viscera. It is necessary to know about all the layers in this disease.

Treatment: In *Qeel* initailly the contents of the scrotum are lifted upward by soft massage from the scrotum then applied with the paste of astringent drugs. Then a triangular sac of the size of groin is formed and filled up with crushed *Badian* (Foeniculum vulgare, Fennel) and *Zeera* (Cuminum cyminum, Cumin), on each corner a cord is tied then the sac is bandaged on that place firmly adherent. The patient is lied down on his back during tying of the cord.

In case of physocele carminatives are given internally and flatus producing foods should be avoided in mother and child.

In abdominal or inguinal hernia *Nankhwah* (Trachyspermum ammi) is powdered, mixed with egg white and applied over the affected part. For strong effect astringent drugs are used. Abdomen is also bandaged with the sac which is filled up with crushed fennel and *Zeera*. Mostly this sac is sufficient. The main part of the treatment is to keep the child away from crying, shouting and exertion especially during application of the drug or sac, avoiding of all these things is helpful.

The useful Drugs which are applied as paste, Ingredients are: Mastagi (Pistacia lentiscus), Anzaroot (Leguminosae), Kundur (Boswellia serrata), Leaves and Jauz Sarv (Cupressus sempervirens), Acacia, Damul Akhwain (Dracaena cinnabari), Flower of Anar (Punica granatum), Mur Makiki (Commiphora myrrh), Alum, Abhal (Juniperus communis), and Huzaz (Berberis aristata). All these drugs are crushed and mixed with emulsion of Mako (Solanum nigrum) and applied on affected part.

Formulation for other types of hernia: Flower of Anar (Punica granatum), Mazu (Quercus infectoria), Leaves of Aas, Maurid (Myrtus cmmunis), Mur Makki (Commiphora myrrh), Sibr (Aloe vera), Kundur (Boswellia serrata), Jauz Sarv (Cupressus sempervirens), Zaft Rumi (Pitch), Muqil Azraq (Commiphora mukul), Abhal (Juniperus communis)

All above drugs are crushed and mixed with *Saresham Mahi* (Acipenser huso, Isinglass) and applied on affected part.

Another drug: *Sirgeen Mosh* (Rat dung) pounded with milk, made paste and applied over groin and scrotrum.

Chapter, 48: Zaheer (Dysentery)

It is peristaltic movement of the rectum adjacent to the anal canal. Its characteristic is that each time the patient feels urge for defecation nothing comes out despite intense exertion except a little mucus and fluid, therefore this disease also called 'Zujaja'. It occurs in children due to cold exposure in lower part or some times due to bile as in acute diarrhea.

Treatment: In case of cold, Kamun (Trachyspermum ammi) and Hurf (Lepidium sativum) crushed together and mixed with cow ghee and given to eat with cold water when required.

Other Formulation: Jaoras 'Panic grass' mixed with Khakistar Gaz, 'Jhao, Turfa' (Ash of Tamarix articulata) or Khakistar Pushk Gosfand (sheep dung ash) is heated on the frying pan, wrapped in a cloth and fomentation of anus is done by this drug or the child is seated upon this. Sitting over the fresh hot brick wrapped in a sheet is also beneficial. Heat should be moderate so that no harm occurs. Pessaries of garlic are also beneficial.

Seeds of cold drugs are given in the dysentery caused by heat. Use of laxatives or astringents should be avoided, even in case of incomplete evacuation so that true or false type of dysentery can be differentiated.

Use of *Gul Qand* with proper mucilage in mother and child is beneficial for strengthening, lubrication and glutinous properties.

Other drugs: Egg yolk mixed with rose oil heated moderately then the child is seated upon this drug so that it permeates into the rectum. It has wonderful effect for removal of the rectal swelling and tortuosity. Diets mentioned earlier should be carefully given in the loose motion or constipation.

Chapter, 49: Deedan (Worm infestation)

The commentator has written less about this disease. So I am describing what I found most useful in my experience and what I learnt from our experts.

Note: Something used internally or externally are harmless so most of the fruits or seeds eaten are among them. Some objects are harmful internally but harmless externally. However Safed Aab Arziz (Raang ka pani, Tin) is causing ulcer and great damage when used internally while externally causes no harm. Therefore it is applied over the cheeks for glowing color of the skin in night and washed out in the morning. Some drugs are harmful in both forms internally and externally like Zangar (Verdigris) and some acids. Some drugs are harmful externally like onion and garlic produce ulcer externally while these are harmless internally. Konnch is the fruit which is harmless internally but it causes severe itching externally so the method of use for wormicide is that 2 pieces of Konnch fruit is soaked in rice water overnight, in the morning it is peeled with a knife and mixed well with the water then given to eat with care that it may not touch the skin. It is given continuously for 3 days then all worms are expelled after being killed.

Other tried and tested decoction:

Initially child is given cow milk with sugar for 4-5 days as per his need then Rind of the

sour pomegranate root 72 gm is soaked in 750 ml of water over night. It is boiled in the morning by adding 50 gm of Red Sugar till water is reduced to m then it is filtered and given to 9-10 year old child. It is given for 3 days alternately. The syrup made of above root also can be used for each age group.

Another Formula. Powder which is useful for killing and expulsion of worms and prevention of further infestation, Ingredients: *Turmus* (Lupine), *Sarakhs* (Fern), Arminina Bole, *Darmana Turki* (*Artemisia maritime*), *Bao Badang Kabuli* (*Embelia ribes*), *Afsanteen Rumi* (*Artemisia absinthium*) each 1 gm, *Sibr Saqutri* (Aloe barbadensis), *Post Haleela Kabuli* (*Terminalia chebula*, Myrobolan) each 2 gm

All above drugs are crushed and powdered finely and kept. Dose: 5 gm for 2 years child. **Another** Formula. Ingredients: *Palas papra* (*Butea frondosa* seeds), *Badang Kabuli* (Embelia ribes), *Khardal* (Mustard) each 2 gm, *Suhaga* (Borax) 1 gm, Black Salt 1 gm

All above drugs are crushed and powdered finely and held in reserve. Dose: 0.5-1 gm for 2 years old child.

Another Formula. Ingredients: Afsanteen Rumi (Artemisia absinthium) each 1 gm, Sibr Saqutri (Aloe barbadensis) 2 gm, Shaftalu (Peach, apricot nuts), Qanbeel, Palas papra (Butea frondosa seeds) each 1 gm, Khardal (Mustard) each 2 gm, Bitter almond 1 gm

All above drugs are crushed and pounded in Leaves juice of *Karela* (Momordica charantia, Bitter Gourd) then pills like pea size are made. Dose: 2 pills per day for 2 years old child.

Another Formula: Coconut 72 gm given each day for 3 days, on 4th day 72 gm red sugar is given to eat, no water is given till one hour then a little water is given to relieve thirst if worms are expelled along with loose motion at noon it is better otherwise foods are given afternoon, worms are expelled with loose motion in the night

Note: If worms are expelled after use of wormicide drugs it is better otherwise purgatives are given after 3-4 days to expel the dead worms. Because dead worms if remain in the stomach their bad vapors may reach to the brain causing severe harm.

Chapter: 50, Khuruj al-Maq'ad (Rectal Prolapse)

It occurs in children mostly after dysentery or diarrhea because their organs are weak due to predominance of humidity.

Treatment: Rind of Anar (Punica granatum, pomegranate), Fresh Aas (Myrtus cmmunis), Juft Billot (Quericus incana), Warad Yabis (Dried Rose), Qarnul Ayyal (Stag Horn, Cervus elaphus) burnt, Shib Yamani (Alum), Taf Muqashar, Gulnar (Flower of pomegranate), and

Afis (Quercus infectoria). All these drugs are taken in equal amounts and boiled in the water extensively so their effects come in the decoction then Aabzan (Sitz bath) is performed. Aabzan: the child is made to sit down in this decoction. The decoction should be lukewarm to produce quick effect. It gives complete relief if the skin of old sieve is burnt, powdered and sprinkled over it.

An informed child should be asked to reduce it inside by his finger after applying the drug. If the prolapse of rectum is due to inflammation it should be properly anointed by wax and oil so it may return back immediately. A paste made by dissolving Cassia fistula in the juice of green *Mako* should be applied over the inflamed rectum. Sometimes this disease appears in early childhood and disappears itself as child grows up without any medication.

Chapter: 51, Hurga al-Baul (Burning Micturition)

Irritation of the urethra while passing urine, it may be due to hot atmosphere or use of bitter and hot diet by the mother or child.

Treatment: Watermelon juice mixed with sugar or emulsion of *Khirfa* (*Portulaca oleracea*) is given to eat. The child is seated over the watermelon juice. Heat producing agents should be kept away from mother and child.

Mako (Solanum nigrum) is softened and applied as liniment over the groin, genitals and testes. Drinking of yoghurt is also beneficial.

If need arises dry coriander is soaked in the water and made emulsion of *Kahu* (Lactuca sativa) then administered to the child.

Burning urination accompanied with fever probably due to bile matter is treated by purging and neutralization and special therapy of the fever.

Chapter 52: Baul Dar Farash (Bedwetting)

It is involuntary urination (Enuresis) during sleep in the trouser wich is caused by cold nature and laxity of urinary bladder.

Treatment: Kundur (Boswellia serrata), Sod (Cyperus rotundus), Khulanjan (Alpinia galanga), Juft Billot (Quericus incana), Habbul Aas (Myrtus cmmunis), and Gulnar (Flower of pomegranate). All above drugs are taken in equal amounts, crushed and powdered then given internally. Jund Bedastar (Castoreum) and Musk mixed with the oil of Fennel and Sosan (Lily) are rubbed over the bladder.

The powder of these four drugs is also much beneficial: Mastagi (Pistacia lentiscus), Shah Billot (Quericus incana), Black Haleela (Myrobolan) and Sugar

Best measure is that child should be awakened few times during sleep for passing urine. No drink or food should be given at bed time. All cold, moist and diuretic drugs should be avoided. *Gulqand* (Rose preserve), roasted meat, dry fruits and hot drinks should be included in the diet.

This Majun (Confection) is beneficial, Ingredients: Kundur (Boswellia serrata) powder 5 gm, Habbul Aas (Myrtus cmmunis) 5 gm, Honey 200 gm

Majun is made of above drugs and given to the child as per need.

Incessant use of *Jauzbua* (Myristica fragrans, Nutmeg) and *Mur makki* (*Commiphora myrrh*) every morning is also beneficial.

Bread mixed with ferment and pigeon dung is effective, likewise coconut and *Shahdana* (Hemp seeds) are also useful. Mostly it needs no treatment it goes off on itself after puberty. Some times a little rebuking and slapping is also required.

Chapter-53: Usr al-Baul (Dysuria, Difficulty in Urination)

Difficult or painful passing of urine is of two types:

1. It is caused by fine stones of kidney or bladder. It is a known fact that bladder stones are more prevalent than kidney stones in the male children. In female bladder stone is rare due to wide neck of their urinary bladder and less tortuousity of the urethra.

Difference between the stone and sand of the kidney is the severity of the symptom and the difference between the stones of bladder and kidney is that in case of stone or sand in kidney there is heaviness and distension at lumber region. Initially urine is turbid and thick followed by clear urine, color is red or pale, sand is reddish. In case of bladder stone urine is white and thin, there is pain at the root of the penis, after a while urine again reappears, pain occurs in pubic region at the site of bladder.

It is to be noted that dysuria and vesicular pain arise only when the stone is entangled in the bladder neck. This disease is mostly hereditary.

Treatment is given for pain relief and dilatation of urethra by these drugs: Babuna (Chamomile), Persiaoshan (Adiantum capillus veneris), Karafs (Apium graveolens), Qurtum kofta, Khuskdana (Carthamus tinctorius), Leaves of Aspghol (Plantago ovata, Aspogel), Leaves of Khirfa (Portulaca oleracea), Leaves of Banafsha (Viola odorata), Leaves of Kunjud (Sesame), Karnab, (Brassica oleracia), Shibbat (common dill), Hulba (Fenugreek), Seeds of Katan (Linseed), Root and leaves of Khubbazi (Malva sylvestris), Khatmi (Althaea officinalis, marsh mallow) with root and leaves and Khar Khasak (Tribulis terrestris)

All above drugs are boiled in sufficient water, the decoction is taken out and the child is seated in the lukewarm decoction so that the water reaches up to the level of waistline. It should be repeated 2-3 times a day then body is wiped off with the towel.

Oil of scorpion and Chamomile is massaged over the loin in kidney stone and over the pubic region in the case of bladder stone. Intake of diuretic fluid is beneficial in both cases and it is given at the time of sitz bath.

2. The dysuria may arise due to the stone in the bladder. The best method to remove it is that the patient is lied down on his back, both legs are raised up, pelvis is massaged from down to upward till the stone in the neck obstructing the urine is dislodged from its place then urethra is dilated and urine is freely passed.

If stone comes in penile urethra, penis is dipped in warm water. Proper mucilage and oil should be instilled into the urethra and the penis is gradually massaged with hand towards the anterior till the stone comes out. In this process severe pain and discomfort may arise so local anesthesia may be required. *Flonia* is tried in this case other narcotics like *Luffah*, *Barshasa* and antidote like opium can be given. If nothing is beneficial and stone is not coming out of the penile urethra and there is fear of death due to urine retention and severe pain it should be referred to an expert surgeon who brings out the stone by doing proper surgery.

Chapter 54 - Ehtibas al-Baul (Retention of Urine)

Nawab Alvi Khan has written that a child of nine month was suffering from fever for 20 days with constipation, urine was not passed freely and whole abdomen was hard he was given the decoction of following drugs for 3 days and got relieved completely.

Ingredients: Mako (Solanum nigrum) 12 gm, Badian (Foeniculum vulgare, Fennel) 12 gm, Maveez Munaqqa (Vitis vinifera) 24 gm, Uood Saleeb (Paeomia emodi) 1 gm, Gulqand 36 gm. For next 3 days Cassia fistula 12 gm with Almond oil 1 gm was given to the child and got relieved completely.

Another formulation: Seeds of *Kharpaza* (*Cucumis melo*, Musk Melon) 2 gm, *Karafs* (*Apium graveolens*) seeds 1 gm, Seeds of radish (*Raphanus sativus*) 1 gm, Distilled water of *Mako* (*Solanum nigrum*) 50 ml, *Hajrul Yahud* (*Lapis Judacius*) 1 gm and Sugar 1 gm

Drug 1 to 3 are smashed in drug 4 and emulsion is made added with drug 4 and 5 is given to the patient.

A young pigeon is sacrificed over the urinary bladder so that warm blood is spread over it then the stomach of the pigeon is cut down and bandaged over the site of the bladder. The diet of the mother and child should be chicken soup and soft rice.

Another formulation: Maghz tukhm kaddu shirin (Pumpkin seeds) 4 gm, Seeds of Kharpaza (Cucumis melo, Musk Melon) 4 gm, Seeds of Khiar (Cucumis sativus, Cucumber) 4 gm, Khar Khasak (Tribulis terrestris) 2 gm, Habbul Qilt (Dolichos biflorus) 2 gm, Maghz Khasta 1 gm, Aaloo Baloo (Ceratonia siliqua) 1 gm, Salt of Radish 1 gm, Scorpion Ash 4 gm, Ramad Aabgeena 2 gm, Fitr Asalion, Karafs Pahadi (Celery of mountain) 2 gm, Saleesalios, Hing (Ferula qalbaniflua) 2 gm, Revand Cheeni (Rheum emodi) 2 gm, Hajrul Yahud (Lapis Judacius) 2 gm, Hajrul Hut (Fish stone) 2 gm, and Kakanj (Physalis alkakenji) 1 gm

All the above drugs are crushed and powdered. Dose: 1 gm given to 2 years old child. Subsequently following drugs are given. Ingredients: *Kakanj* (*Physalis alkakenj*i) 1 gm, Seeds of *Kharpaza* (*Cucumis melo*, Musk Melon) 4 gm, Seeds of *Khiar* (*Cucumis sativus*, Cucumber) 4 gm, *Khar Khasak* (*Tribulis terrestris*) 2 gm, *Habbul Qilt* (*Dolichos biflorus*) 2 gm, *Aaloo Baloo* (*Ceratonia siliqua*) 1 gm, and seeds of Radish 1 gm

Emulsion of above drugs are taken in distilled water of *Mako* (*Solanum nigrum*) and *Khar Shutr* (*Hedysarum alhagi*) 36 gm each then dissolved in *Sharbat Aalu Balu* and *Sharbat Bazuri Motadil* 3 gm each given to child. *Neel Badi* or *Neel* flower is made paste with water and applied over the pubic region below umbilicus.

Another formulation: *Badian* (*Foeniculum vulgare*, Fennel) peeled 2 gm, Flower of *Teesu* (*Butea frondosa*) 2 gm, Black salt 2 gm, *Pishkal Mosh* (Orbicular dung of rat) 1 gm

All above drugs dissolved in hot water and applied over the pubic region below umbilicus.

Another formulation: Flower of *Teesu* (Butea frondosa) 24 gm, Residue of *Gul Moasfar* (Carthamus tinctorius, Saf Flower) 100 gm, Common Salt 24 gm

All above drugs are boiled in water 250 ml and *Natul* (irrigation) is done over the pubic region it is poured on a particular part of body keeping distance to cure disease, generally warm *Natul* is used to reduce inflammation or pain.

There is a popular method in which *Sapish* (Pediculus) is inserted into the urethra after using all diuretics. An active one black or white *Sapish* is taken and inserted into the urethral opening and mobilized with a *Sarakhs* (Fern) pushing towards the opening which results in immediate passage of urine due to propelling force.

Warning: If there is constipation it should be removed by use of laxatives like Castor oil mixed with the emulsion of Fennel and White Zeera (Cuminum cyminum).

Another formulation: Hashish (Cannabis indica) 36 gm and Khar Khasak (Tribulus terrestris) 36 gm are boiled in water 250 ml till water reduced to one fourth then filtered, added with cow butter 4 gm and given to eat.

If nothing is beneficial and abdomen is distended then this powder should be used followed by the *Lassi* made of cow milk 50 ml 2-3 times a day.

Ingredients of the powder formulation: Revand Cheeni (Rheum emodi) 5 gm, Shora Qalmi (Potassium Nitrate, Salt peter) 2 gm, Ilaichi Kalan (Amomum subulatum) 2 gm, Ilaichi Khurd (Elettaria cardamomum) 2 gm, Zeera Safed (Cuminum cyminum) 2gm

All above drugs are crushed, powdered finely and 1 gm given to the child.

If the child's condition becomes grievous and nearly fatal he should be given enema with salt and *Khaksi* (Sysymbrium irio) followed by *Shora Qalmi* (Potassium Nitrate, Salt peter) 2 gm dissolved in radish water.

Chapter 55: Advia Mudirrah (Diuretic drugs)

Hot nature drugs are: Karafs (Apium graveolens) seeds, Aneesun (Pimpinella anisum), Badian (Foeniculum vulgare, Fennel), Satar Farsi (Zataria multifloria), Shoneez (Nigella sativa), Halyun (Asparagus officinalis)

Cold nature drugs are: Seeds of *Khiarain* (Cucumber and Snake Cucumber), *Tukhm kaddu shirin* (Pumpkin seeds), *Kakanj* (*Physalis alkakenji*), Seeds of *Hinduana* (Water melon)

Moderate nature drugs are: Persioshan (Adiantum capillus), Fuwah, Majeeth (Rubia cordifolia), Seeds of Kharpaza (Cucumis melo, Musk Melon)

Diuretics should be given preferably after laxatives. Best laxatives which are also beneficial in calculus are: *Tukhm Khitmi* (Seeds of *Althaea officinalis*), *Sapistan* (*Cordifolia latifolia*), *Injeer* (Fig), and *Aslus Sus* (*Glycyrrhiza glabra*)

These drugs are taken as per need and boiled in the water then filtered and added with Cassia fistula nuts and *Turanjabeen* (Alhagi pseudalhagi) and given after cleaning.

Note: Use of a bird known as *Khatateef* or *Ababeel* is tested and tried in dysuria and calculus. An *Ababeel* (Martin) bird is taken and sacrificed it is boiled after cleaning in the water of *Karafs* (Apium graveolens) and almond oil and also added with *Darchini* (Cinnamom), *Khulanjan* (Alpinia galanga) and *Kashneez* (Coriander). Use of this drug after *Tanqia* (purging) has great benefit. Main object at this place is assimilation of diets with easy digestion and strengthening of stomach.

Note: Ashes of the scorpion and rabbit are powdered together. *Yadallah* a famous drug is also beneficial for calculus. *Hajrul Yahud* (*Lapis Judacius*) pounded with water is kept preserved and a paper pessary dipped in this drug is inserted into the urethra which is

beneficial in calculus dysuria. *Majun Hajrul Yahud* with emulsion of *Tukhm Khayarain* and *Kharpaza* is much effective.

Type two: Inflammation of the Kidney or bladder with blood clots and pus in the bladder or wind of the bladder or obstruction in the urethra due to sticky humor in the urethra or hot humor which fall on the bladder all these things lead to dysuria. It is described in the book of *Tibb Akbar* with detail. Therefore proper management of the mother and child should be carried out.

Chapter 56: Hasba wa Judri (Measles and Small pox)

It is to be noted that our guide and expert physician *Ahmadullah Khan Alvi Khani* had composed a comprehensive tract on this disease with the title of *Shifa al-Majdur*. This treatise comprises 5 sections:

Section 1: Judri, its types, causes and symptoms.

Section 2: Description of Hasbah (Measles).

Section 3: Treatment of Judri and Hasbah

Section 4: Protection of organs against Judri and Hasbah

Section 5: Removal of the marks left over by Judri and Hasbah

I (Fazl Ali Shifae Khan) have copied here chapter 3 of *Shifaul Majdur* completely so that the treatment of this disease are easily understood by the physicians. Other works on this disease is done by Sheikh Mohammad Arzani who has written this disease in his book *Mufarrehul Quloob* which is more inclusive and makes a physician satisfied. His comments are also quoted here. After perusal a physician will find a complete treatment of this disease without any need for further books. After completing the comments of both these experts I have mentioned my own experiences also.

Initially the comments of my teacher Hakim Ahmadullah in chapter 3 are described here:

Section 3 of Shifaul Majdur. Treatment of Juddri and Hasbah

Judri (Small pox, Variola): (A highly contagious viral disease characterized by fever and weakness and skin eruption with pustules that form scabs that slough off leaving scars).

Hasabah (Rubeola, An acute and highly contagious viral disease marked by distinct red spots followed by a rash; occurs primarily in children)

It is necessary to do blood letting before eruption of *Juddri* by venesection or cupping or leeching according to the age of the patient, nature, habit and season etc. there is a congestion of blood in Measles so blood letting is done at the end. After appearance of

small pox, No venesection should be done except in case of severe congestion and dominance of blood. At that time a little blood is drawn out to reduce the congestion. Blood letting from the blood vessels of the nose is much beneficial in *epistaxis*. It gives relief from the fever, headache and reduces the disease, protects the main organs from the harm of *Judri* making comfortable for children.

Avoiding venesection where it is necessary to be done may cause damage to an organ in case of excessive extinguishing (*Tatfia*). In the initial period of *Judri* and *Hasbah* such materials should be added in the diet which give strength to the viscera, divert the matter outside, causes extinction and thickening of the blood without producing stasis in the nature like *Unnab* or Tamarind, *Asfedaj* (white Lead), *Adas* (Lentil) etc. some light laxatives also are given like *Kaddu shiri* (Pumpkin seeds), *Hinduana* (Water melon) *Turanjabeen* (*Alhagi pseudalhagi*), *Sheer Khisht* (*Fraxinous ornus*, Manna). Potato infusion with syrup *Unnab* is also beneficial.

In the early stages when symptoms of *Judri* start to appear *Qurs Kafur* or *Rubb Kavi* is beneficial. Syrup *Tal'* a is much useful. When small pox papules start to appear on 2nd day cooling is dangerous because cooling of the residue causes stasis inside the body on account of thickening of the blood and extinguishing of the agitated state. Its harmful effects may reach to the vital organs causing *Qalq*, *Karb* and *Ghashi* (Restlessness, distress and Syncope). At that time *Advia Mulattifa* (Attenuant drugs), *Mughallia* and *Mufattiha* (deobstruent drugs) are given such as extract of Fennel and *Karafs* (Apium graveolens) with emulsion taken in sugar. Decoction of the roots and seeds which are not too hot like *Fennel*, *Kasni* (*Cichorium intybus*, Chicory) seeds and roots with a little saffron are also given. Decoction of Fig is also beneficial in dispelling the materials outside.

At that time most beneficial drugs are: Luk Maghsool (Cateria lacca) 18 gm, Adas (Peeled Lentils) 21 gm and Kateera (Traga canth) 10 gm are boiled in 250 ml of water till the water reduces to one fourth. Then this decoction is given to the patient.

The drugs which help for appearance of the Judri papules are: Yellow fig 21 gm, Adas (Peeled Lentil) 9 gm, Luk Maghsool (Cateria lacca) 9 gm, Kateera (Traga canth) 6 gm, Fennel seeds 6 gm. The decoction made of these drugs is given to drink as it keeps the heat away from around the heart and it is beneficial for palpitation. Our learned teacher Syed M. Hashim Alvi Khan has written in his book of Qawaneenul Ilaj.

Syrup is made of *Unnab* (*Zizyphus vulgaris*, Jujube), *Arq Gaozaban* (*Borago officinalis*) and 7 gm *Khaksi* (*Sysymbrium irio*) is given to eat. A little *Khaksi* is sprinkled in the cloth and bed sheets.

If appearance is sluggish then *Luk Maghsool* (*Cateria lacca*) 3 gm, *Kashneez Khushk* (Dry Coriander) 3 gm, Fennel seeds 3 gm, *Mako* 3 gm, Yellow Fig, 7 pieces

These drugs are boiled in the water and this decoction is given with *Sharbat Unnab* and *Khaksi* seeds. A little warm water is poured so the pores are dilated by its vapors and papules start early eruption.

For protection of internal organs:

Unpierced pearl is pounded and given to eat for easy appearance and relieving of pain. *Gul Shaqaiqun Noman* (Tulip, Anemone) dried and powdered is also given on that day. On 4th or 7th day when eruption is desired decoction of peas, pulse and carrot are given with fig. After appearance of Judri papules use of oil is not excluded, because the nature is weak and humid at this point of appearance. Ancient physicians used almond oil for extinguishing the heat fire in diets and drugs on account of that heat is intensified from dryness and humidity of organs. Latest physicians had absolutely prohibited the use of oil and fats as a preventive measure. Ancient scholars prohibited its use at the time when *Judri* is slowly erupting, at that time no perfume is given to smell even no lamp is illuminated near the patient so that no insect reaches to the patient's body.

The patient's body should be covered with a cloth and protected from the wind especially in winter, because cooling causes constriction of the pores and diversion of the material therefore drinking of ice water is also prohibited. After venesection, at the end of 3rd days from fever diversion of the material inward from outside is counted bad. Before it, according to *Qarshi*, cupping is not harmful due to its absorption from the exterior of the body. While hot atmosphere may cause fainting and cold air causes constriction so the body is kept protected by clothing. Camphor and Sandal should be given to smell. If there is no escape from the exposure to cold much care should be taken.

To stop the cooling and to adopt the warming is recommended for the quick appearance of Judri. If heat is disseminated inside the body and tongue becomes black, warming should be stopped. A paste of the cooling drugs is applied over the abdomen of the patient of *Judri* and *Hasbah* as dyspnea, diarrhea and haematuria may occur. In the end protection of the body is necessary as the dissolution is dangerous. In this condition the patient is given diet of lentil. The water in which the pulse is boiled few times is mixed with the water of sour pomegranate, *Sumaq* (*Rhus coriaria*, Sumach) and *Ghorah* (sour grapes), made into paste with ground barley, added with *Gil Armani* (*Arminina Bole*) and *Samagh Arabi* (*Acacia arabica*) is much beneficial.

Unani formulation like *Qurs Tabasheer Qabiz, Sharbat Habbul Aas, Rubb Bahl*(Quince fruit) and the drugs which were used in the initial stages of the disease for thickening of the blood, refrigeration and prevention of outburst of blood like *Ghorah* (sour grapes), *Reebas* (Rheum emodi, Ribes) and juice of cold fruits have greater effect and benefits. Likewise syrup *Gazar* (carrot) and syrup *Tala* (spathe of the Date Palm, Phoenix dactylifera) is also useful. Different ingredients for syrup *Gazar* are written in *Qarabadeen*.

Avicenna has written a wonderful and tonic formulation for Syrup Gazar (carrot), Ingredients: Rubb Gazer (Carrot extract), Burada Sandal safed (Santalum album uood powder), Sirka Muqattar (Distilled Vinegar), Aab Ghorah (Water of sour grapes)

Drugs 1 and 2 are soaked in the mixture of drug 3 and 4 for few days and boiled in simmer fire till it becomes ready for massage, it is better to have much quantity of Distilled vinegar and Water of sour grapes.

Sour curd is taken and cheesy material is removed in making of Ma'al-jubn (Whey or watery part of milk) by extensive Terveeq (Separation of Drug) or boiling then Fuqa (A kind of wine) is prepared with barley flour and made sour by adding few drops of lemon Juice. This process is repeated few times to get better preparation and 5 parts are taken. Extract of these drugs: Kumassara cheeni (Guava) 3 gm, Bahidana (Cydonia vulgaris) 3 gm, Sour pomegranate 3 gm, sour apple 3 gm, Zarur (Azarole) 3 gm, Lemon Juice 3 gm, sour potato 3 gm, Tala (spathe of Phoenix dactylifera) 3 gm, Kundush, Nakchhikni (sneez wort) 3 gm, Toot Shami Kham (Morus indica) 3 gm, Mishmish Kham Tursh (unriped Apricot) 3 gm, Ghorah (Sour grapes) 3 gm, Reebas (Rheum emodi, Ribes) 3 gm, Grape stem 3 gm, Rose 3 gm, Neelofer (Nymphaea alba) 3 gm, Banafshah (Viola odorata) 3 gm, Turanj (Citrus medica) 6 gm, Orange 6 gm, green Kashneez (Coriander) 4 gm, Kahu (Lactuca sativa) leaves 4 gm, Khashkhash (Poppy) leaves 4 gm, Kasni (Cichorium intybus, Chicory) leaves 4 gm, Khirfa (Portulaca oleracea, Parselane) 4 gm, Beid (Salix alba) leaves 4 gm, apple leaves 4 gm, guava leaves 4 gm, Za'rur leaves 4 gm, Rose leaves 4 gm, Asa Al Raee (Lal Sag ka Patta, Leaves of Amarantus tristis) 4 gm, Lihya al-Tees (joint weed) 1 gm, Zarishk (Berberis aristata) 1 gm, green mint 6 gm. And these drugs also taken: Kahu (Lactuca sativa) seeds 1 gm, Kasni (Cichorium intybus, Chicory) seeds 1 gm, Flower and seeds of Pomegranate 1 gm and 3 gm, Adas (Lentil) 4 gm, Peeled Barley 3 gm, Dried rose 1 gm, Flower of Neelofer (Nymphaea alba) 1 gm, Sumaq (Rhus coriaria, Sumach) 3 gm

All above drugs are taken together and boiled till water is reduced to its half then taken out of fire, cooled, cleaned and massaged forcefully. Camphor 5 gm is powdered and added to the syrup of 300 *Diram*. The drug is gradually poured on it, the head is covered

by a firm object and simmered on the coal fire till it reaches to boiling point then it is shaken well in the pot, head is tied firmly so the camphor is not wasted. Sometimes drugs like *Sumbulut Teeb* (*Nardostachis jatamansi*), ginger, Fennel, *Aneesun* (*Pimpinella anisum*) and *Filfil Siyah* (*Piper nigrum*) are also added as per need.

When all papules are erupted, after seven days complete maturation occurs but drying still not started, in this condition papules are to be ruptured by the golden needle, fluid is wiped out by cotton, because pus in the papules may invite fever and pain due to infection. Learned physician *Qarshi* has said that this process is not prevalent; it should be left as such to be ruptured on its own except in that condition where the matter is corrupt and irritant. The needle is not needed to be of gold, silver needle may be used for better result due to light weight.

This process is endorsed by some recent physicians also, therefore Shah Mohammad Akbar Arzani has written in his book *Mufarrehul Qulub* that ancient physicians have made salt application to the papules compulsory after full maturation for quick drying and falling of slough with utmost care that the salt not reaches to the ruptured pustule to cause pain. Only unruptured papules to be salted and the ruptured pustules to be left as such, till it heals up then it is salted if there is any fluid remains.

Author Shifaee Khan written in the foot notes: 'There is a risk factor in the salting process. Sometimes pain and burning due to salting reaches to the heart which may result fatal and children in some conditions cannot tolerate this process. Therefore physicians should avoid it and to use camphor and rose water for drying is better'.

The method of *Tamleeh* (salt application): Salt is dissolved in the water added with Saffron and a solution is prepared. A piece of cotton dipped in this fluid is placed upon the papules. Decoction of rose and lentil added with camphor and sandal is better if taken instead of water. *Tadkheen* (Fumigation) with the uood of *Kazneez* is also useful such as burning of *Kazneez* near the patient in winter season.

As papules have excessive fluid so fumigation with the stem and leaves of *Aas* (Myrtus communis) is done. The best process is that the small pox afflicted person is lied down over the flour of rice, *Jaoras* (Panic grass), Barley and *Baquila* (*Faba vulgaris*). It is also better that a fine cloth mattress filled up with all these flours is spread below the patient, likewise filling with *Sosan* (Iris ensata) leaves which is very soft is also useful. Use of oil to prevent drying at this time is harmful.

If Judriis ulcerated then ointments like Marham Safed Aab Kafurietc are used. Sprinkling the powder of Safeda (White Lead), Murdar Sang (Litharge), red rose, Anzaroot (Leguminosae) and Damul Akhwain (Dracaena cinnaban) is also beneficial.

Sloughing may occur in the nostrils then use of *Qairuti* (poultice) made of rose oil, *Safeda* (White Lead) and *Aqleemia Fizza* (Dirt of Silver) is beneficial. It is better to apply oil after drying of papules as at the time of ulceration so that slough will fall off quickly and wound will heal therefore oil has been made base of the ointment. *Marham Surkh* is better for the ulcer of *Judri*.

A type of the *Hasbah* is *Saudavi* (Melancholic). It is that kind of *Hasbah* from which the fluid like pus is secreted. Body color becomes pale or black as *Hasbah* being the combination of black and yellow jaundice is worst of all types and fatal. Sometimes it is accompanied with severe diarrhea and vomiting.

Treatment: It is combined of *Hasbah* and Jaundice. Use of *Kasni* (*Cichorium intybus*, Chicory) and *Zarishk* (*Berberis aristata*) is prevalent since ancient times. The learned physician *Gilani* has said in the commentary of Canon 'that villagers (*Ahl Asatiq*) have tested prescriptions for small pox that its acceptance and denial is beyond the judgment of rational persons. For example when small pox appears in a child and gets filled up with fluid, one of the pustules is ruptured and its fluid is rubbed on the right arm near the wrist of a healthy child who is not afflicted with *Judri* and a few needles are pricked on that site so the fluid mixes with the fluids of the skin. After a few hours he would get light fever and few pustules would appear near that place (of vaccination) and on rest of the body and he would recover without any trouble'.

This is also among these, that seven pieces of citron seeds is taken and applied on the body of smallpox victim then these seeds wrapped in an old cloth and suspended in the neck of the healthy child as a result he would get light fever and appearance of papules like the seeds of citron and he would recover completely within few days.

(cont..)