

Interpreting the Signs

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要 旨

どのような症状の診断と治療もその原因がどのようなものであるかによって決定される。この論文は現代医学と多くの代替医療における胆のうの障害について論じた。

Abstract

Both the diagnosis and treatment of any condition is dependent upon the way in which genesis and progress are interpreted. This paper examines how a disturbance in the gall bladder might be regarded and treated according to, on the one hand, main stream modern medicine, and on the other, to various alternative ways in which the condition might be understood.

In modern Western thought, illness is defined as the subjective appraisal a patient has of why he or she is feeling bad, or of what is wrong. Disease, on the other hand, is the objective, clinical view a health professional takes of particular symptoms a patient manifests, bolstered by the read outs of mechanical measurements of those symptoms. The analysis of postmodern disease, though in recent years grudgingly admitting the importance the patient's mental state plays in the course of any illness, yet remains at base science and not person centred. Western medicine is reductionist, looking not at the whole person in a system of systems, but at particular tissues, cells, body parts.

This is one way of viewing illness and disease, cause and effect, one model set in a certain culture and time frame. There are others. It might be instructive to examine a malfunctioning of the body from varied standpoints and explanatory theories. Problems that may arise in an adjunct organ to the liver, the gall bladder, can serve as an exemplar.

The gall bladder's functions, malfunctions, and treatment, according to the Western medical model, may be summarised thus. This organ is closely allied to the liver, and the liver itself has many functions, one of which is digestive. From salts, spent haemoglobin pigments, cholesterol, phospholipids and electrolytes, the liver makes bile, which acts to emulsify fats thus providing the fat-digesting enzymes found in the duodenum with a greater surface area for action. Vitamins A, D, E and K are fat-soluble. In the absence of bile salts, these vitamins are poorly absorbed, with deleterious effects on general health. Prior to usage, the concentrated bile is stored in the gall bladder, a small, green sac, with thin walls, that lies in a hollow beneath the liver.

Various medical conditions including infections, tumours, dehydration, hormonal imbalance, and

dietary indiscretions possibly leading either to hepatic cirrhosis or to an excess of cholesterol, may have a side effect of causing the bile to become over-concentrated. This often serves as a precursor to the backing up of the substance, which in turn can give rise to the circulation of bile salts in the blood stream rather than in the digestive system. Concomitant with this situation is a yellowing of the skin and eyes, jaundice. Another outcome of bile's being concentrated, may be the formation of gallstones, crystallised cholesterol, which can block hepatic or bile ducts, an excruciatingly painful complaint.

"Sixteen million Americans suffer from gallstones, twelve million of them women. No one is certain why this disparity between the sexes exists, but it may be due to the drop off of oestrogen levels in post menopausal women, which is associated with higher cholesterol levels and greater incidence of heart disease."

This at least is the modern, Western, medical interpretation of interference in biliary functioning, and various procedures have been developed to deal with the condition. In the past few years, some gallstones have been fragmented *in situ* using ultra-sound techniques similar to those employed for the breaking up of kidney stones. A drug such as chenodiol, which is derived from natural bile salts, could be administered to break down stones, though daily dosing for up to two years may be necessary to complete the treatment, for which in any case, not all patients are suitable candidates. A shorter, no more than ten days, but more invasive treatment, involves injecting the drug monocholol directly into the gall bladder for the purpose of dissolving stones. Choledocholithotomy, a procedure still occasionally if not routinely employed, was first done in the latter part of the last century by the American surgeon J. Knowsley

Thornton. In this procedure, the bile duct is opened and the gallstones within it removed. Before he embarked on the practice of choledocholithotomy, J. Knowlsley Thornton had previously used a rubber-jawed pincer designed for nose-polyps to crush gallstones. This practice is now relegated to the medical museum.

Still today, however, in the West, the most common treatment for gallstones is the instant surgical removal of the afflicted bladder. The operation, technically a cholecystectomy, was first performed successfully in 1882 in Berlin by Karl Langenbuch. For some years prior to this, surgeons in the U. S. and France had opened inflamed gall bladders to drain them and remove stones. However, post-operative infections were common, and for those few patients who survived the procedure relatively unscathed, the formation of new stones was not uncommon, for the elements of the life-style that had first caused them, were never addressed.

Western medicine views malfunction in the gall bladder as being an isolated instance of organ breakdown. Treatment aims to remove the offending part and if compensation for its absence is deemed advisable, this will be accomplished by continuing medication and some modifications to the diet.

Gallstones and other problems of the gall bladder are common today wherever a diet, high in fats and cholesterol and low in fibre, exists. This does not however make them strictly a product of modern society. Gallstones have been found in Egyptian mummies. A fifth century B. C. physician, Alexander of Thrales, recorded having found gallstones in a patient. Post-mortem examinations in later centuries identified gallstones as contributing factors to decease. And while physicians in the West have interested themselves in the diagnosis of stones and in their removal, the tenth century Arab physicians' prescription for the cure of

epilepsy and other allied complaints, was not the removal but the introduction of bovine gallstones. These were to be swallowed whole. In France too, until the sixteenth century, the swallowing of stones known as bezoars, usually obtained from slaughtered goats, was thought to be an antidote to poisoning. However, an experiment conducted at the court of King Charles IX disproved the theory. A cook was fed bichloride of mercury and then given abezoar to counteract the effects, which it patently did not. The cook died in agony some seven hours later, and bezoars were thrown out of the pharmacopoeia, or at least of the French version.

Gall is etymologically related to choler and choler to anger, to jaundice, to colour (erroneously), and back to bile. Bile, apart from being a liver product, is also linguistically synonymous in English, with bitterness, blackness, and ill humour.

Bile (yellow) was an essential component in the theory of the four humours, the other three components being blood, phlegm and melancholy otherwise known as black bile. The four-humour theory held sway in Greece, and from there to much of the rest of Europe, from the time of Empedocles in the fifth century BC to just over a century and a half ago. According to the humoral theory, the human body was constructed from the elements of water, earth, air and fire. Allied to these elements were conditions of wetness, dryness, coldness and heat. In the body these elements each had a representative humour. Black bile or melancholy was linked with earth, with dryness, and a with a melancholy temperament; yellow bile's counterparts were air, cold, and an angry personality; blood, fire, heat and the sanguine soul were allied; and lastly phlegm, wetness, and an outlook on life to match were considered as one. Disease or illness followed if any imbalance in the four humours existed. Treatment thus required moves to re-establish humoral equilibrium. Should it be determined

that there was in the patient a surfeit of heat, blood-letting by cupping or the use of leeches would be advised. In the case of there being an excess of cold, measures would be taken to ensure that the patient sweated profusely. Wetness was countered by the administration of diuretics, while dryness, a complication involving the gall bladder, called for rigorous purging. To achieve these clinical goals, great store was set by the use of herbal and later, when alchemy gained popularity, chemical remedies.

In the latter half of the last century, it was reported that persons suffering from all manner of abdominal problems, including complaints of the liver and gall bladder, found relief by tying around their waists, cords which had previously occupied the same place on a statue of Saint Francis. Bourke reports seeing this in the town of Magdalena in Mexico.² But the use of such cords, known as *medidas*, is also documented in Spain and other parts of southern Europe. What the sufferers thought caused their pain in the first place is not obvious, though believing themselves to have offended against God in some way is not unlikely. Whatever the true reason, it seems that a sufficiently strong faith in the healing power of the cords brought about the desired cure.

It was not only the Greeks who held that choler, anger, had its seat in the gall bladder. In the Chinese five element theory too,

"the liver and gall bladder are responsible for controlling and balancing anger. . . . When the liver and gall bladder are balanced and healthy, decisions are made from emotional equilibrium, a characteristic of a healthy Wood Element."³

Traditional Chinese medicine is at least as

complex as Western medicine in its explanatory terms. Both to diagnose ailments and to treat them, numerous interlocking and interdependent factors must be considered; the Five Element Theory, channels and networks for the passage of *qi*, life energy, the oppositions of soft, feminine *yin* and strong, masculine *yang*, plus the effects of dryness, dampness, cold, heat, and wind.

"The Five Elements Fire, Wood, Water, Metal and Earth link the seasons of the year, aspects of nature, the body's organs, and specific foods, herbs, and treatments."⁴

The Chinese theory embraces an idea of a life force, *qi*, which circulates throughout the entire body via a system of meridians. Under the five-element theory, people with gall bladder, wood, problems, should increase food associated with the water element, as water feeds wood. The kidney and bladder are the organs associated with water and in Chinese thinking, the proper functioning of these two organs allows *qi* to be passed on to both the liver and the gall bladder. The gall bladder meridian begins at the temples, zigzags along the sides of the head, behind each ear, and then runs down the neck and shoulders. From there it travels along the sides of the body and down the outside of each leg. The meridian continues to the fourth toe. If examination of the fourth toe shows there to be bunions or swelling, this will indicate gall bladder problems. The gall bladder is classified as a *yang* organ, but an unusual one in that not only is it the only *yang* organ of the body not directly concerned with food, drink or their waste products, but it is also the only one without an opening to the exterior world, the only one that stores a "clean" fluid. Bile is considered to be "clean", food, drink and their wastes are "dirty". The gall bladder is said to be most receptive to *qi* between 11:00 p.m. and 1:00 a.m. Any manipulation of meridial

qi, or any medication or intervention effecting the gall bladder, will, in the Chinese system, be with the express purpose of bringing the wood element in harmony and balance with the other four elements, and with all other interrelated factors. The question of opening, draining, or removing a badly functioning gall bladder does not arise for this could lead to an even more harmful, permanent imbalance.

The Japanese traditional practice of *shiatsu*, like the Chinese, recognises a system of meridians, channels for the passage of *ki* or essential spirit. Systematic pressure is applied to points, *tsubos*, along the meridians in order to release blocked *ki*. For gall bladder problems, pressure is applied to the side of the neck, mid-shoulder, at the top of the back of the arm, over the sciatic nerve on the side of the buttocks, down the centre of the outside of the leg, in front of the ankle, and down to the fourth toe. As with the Chinese system, the Japanese aims to restore harmony to the body, not to dispense with the offending organ.

Growing out of Chinese meridional acupuncture and Japanese pressure point *shiatsu*, is the alternative therapy of reflexology. The salient points in this system for the relief of gall bladder indisposition are not at the end of the fourth toe, as in the Chinese system, nor along the outer sides of the body as in *shiatsu*, but in the very centre of the left palm and left sole, and on the top of the foot just behind the base of the little toe.

Another alternative approach to dealing with bilious manifestations, is the practice of Reiki the channelling of universal energy. For a gall bladder problem, one diagnosed as being caused by an insufficiency of energy, a trained Reiki practitioner would place his or her hands over the affected area and allow concentrated energy to flow from outside the healer's body to within the patient's

sick bladder. Though this treatment has been reported as effective in reversing biliary illness, a person not initiated into Reiki could be tempted to explain the healing less by the application of "universal energy" as by the strong desire of the patient that such treatment should work. Especially given that some Reiki practitioners claim to be able to heal at a distance with no direct physical contact with the afflicted.

Alternative, but not totally ineffectual, are gall bladder treatments by homeopathy, Rolfing and chiropractic. Homeopathy uses minute doses of substances deemed in larger amounts to be injurious to the body, to stimulate natural defenses or cleansing mechanisms. For the pain of gall bladder complaints, Belladonna is a standard homeopathic nostrum. Inflammation of the gall bladder is often treated with tiny quantities of *Berberis vulgaris*, *Hydrastis*, or *Chelidonium majus*. Rolfing is a system of massage and exercise designed to work muscles and fascial structures that are misused, disused or under-used, to restore to them tone, balance, and correct functioning. Presumably less lethargic intestinal smooth muscle may be expected to more effectively expel smaller stones. Chiropractic aims to restore the body to a state of optimal posture so that all parts of the body, including internal organs, can function as nature designed them to.

Like the traditional Greek and Chinese systems, the Indian Ayurveda sees correspondences between body parts, functions, and a system of elements. And, as in the Chinese view, the Indian one holds there to be an all imbuing life force, *prana* in this case as opposed to the Chinese *qi*. In the Ayurveda system, Wood as an element is replaced by Ether, and though both Chinese and Ayurvedic systems contain the elements Earth, Water, Fire and Air, their significance does not directly overlap. In the Indian system, bile rather than the bladder containing it, is of importance and is characterised by water, as are all bodily fluids.

Yet, because bile is involved in digestion, the consumption and reduction of food items, it is also considered to be ruled by the element of Fire. Additional to the five elements which must be in balance, Ayurveda has three forces or *doshas* too that require equilibrium for health. The gall bladder and its secretions, being a mixture of fire and water, is closely associated with *Pitta Dosh*a .

" *Pitta* provides yearning for knowledge, for new experience and understanding. *Pitta* causes one to see the broad picture, to understand divergent needs and to harmonize people's seemingly conflicting desires. *Pitta* types have a willingness to delve into details, to break down resistances, to work hard, and play hard. However, when *pitta* is unbalanced, a person feels great physical hunger, digestive problems, and thirst. There is a lack of gratitude for what is given, because it never seems enough, and much anger as a result of unfulfilled expectations. *Pitta* people may feel considerable hatred and jealousy." 5

One constant of Greek, Chinese and Ayurveda thought, is the connection of biliary and hepatic disturbances and anger.

Many health care traditions emphasise the role of diet and herbs in curing gall bladder upsets. An analysis that is gaining currency of late is one which sees strong relationships between blood types, food intake, and maladies. Seattle, Washington naturopath Dr. Peter D' Adamo, claims stunning success with patients when food elements he believes are incompatible with their blood type are eliminated. He contends that people who develop gall bladder problems are predominantly those with Type A blood. 6 According to this authority,

the second rank of sufferers are those of blood Type AB. D' Adamo also uses a number of herbal preparations to assist his patients in their recoveries.

Fresh root, juice and leaves of the white beet are used in Europe for gall bladder complaints. Worldwide, some common therapeutics for the gall bladder used by naturopaths are apple juice, pear juice, beet tops and juice, dandelion tea and greens, and grapefruit juice. These have the effect of aiding the bile salts to dissolve cholesterol-based stones. Herbs for the gall bladder are celandine, which reduces inflammation of the bile ducts, fringe tree which increases bile flow, and Oregon grape root and yellow dock, both used to stimulate bile production. Six to eight glasses of pure water a day is said to help prevent the formation of gall stones. Once these have formed however, a flush of olive oil and herbs is sometimes recommended to cause the stones to pass from the ducts to the small intestine and then out with the faeces. Should the stones however be too large to exit the duct, this "cure" can cause even greater problems.

Herbal cures have a long and widespread application. Native American Indians have numerous simples to this end.

- *Lak'olwak'adyapi* (Sioux boiled drink) possibly the plant *Coreopsis*. "The flowers and stems are boiled and strained, and used for diarrhea, gall bladder, and kidney trouble". 7
- Equal parts of tomatoes, balmony, yellow poplar, spignut, saffron, cinnamon, nutmeg, and queen of the meadow compounded into an extract and taken three to five times daily is claimed to be an infallible cure.
- A sure cure for jaundice is made by steeping together equal parts of white snake root, burdock, narrow dock, dandelion and cowslip

blows. This is to be drunk in quantities as great as desired

- Another cure for jaundice involves cooking a whole lime under hot ashes, cutting it up and soaking in white wine or vinegar. The decoction is to be drunk in the morning after fasting.
- Also from the American Indian remedy source, poultices of boiled down leeks applied to the offending area while the patient lies down for atleast two hours. On rising from this rest a honey drink is recommended.

In Fiji, croton bark filtrate is used against yellow, (jaundiced) eyes. Also fluid pressed from the bark of *Euodia hortensis* is employed for the same purpose. Liver trouble is treated by the boiled extract of bark taken from *Mussaenda raiateensis*. And for "inability to eat, hardness on one side of the stomach, and stomach pains", a description of classic gall bladder symptoms, there are a variety of remedies. Pressed liquid of the leaves of *Vitex trifolia*, and also *Ficus barclayana* are both used in these cases

Jasminum simpliciflorum is a woody vine found in Northern Australia, the New Hebrides, the Solomons, Tonga and Polynesia. In Tonga a tea is made from the mounded bark to treat jaundice.

The European herbal has the following recommendations for easing gall bladder complaints. *Taraxacum officinalis*, dandelion, the roots make an excellent tonic for liver and gallbladder problems. It has the effect of increasing urine and bile flow, it is a tonic, an anti-rheumatic. It may be given internally as a liver tonic and as a remedy for gallbladder inflammation due to gallstones, as well as a remedy for jaundice. The gall bladder is strengthened by cutting down on food high in fat and cholesterol, and increasing the intake of leafy green vegetables

and wheat. Foods such as citrus and sauerkraut, having a sour taste, are much recommended as are carrots and seaweed.

The Greeks and Romans used ginger in many of their preparations to ease gall bladder discomforts. Interestingly, *zingiber officinalis*, ginger, is an ingredient in more than half of all Chinese medicinal preparations. One of the benefits it brings is a lowering of blood cholesterol.

Indubitably, beyond the few traditions and belief systems looked at here, there are other folk traditions, herbal and otherwise, containing antidotes specific to liver and gall bladder problems. In all the non-Western medical systems examined, beyond the efficacy of specific herbs or techniques lies in a more fundamental understanding of health.

" Health is typically defined in traditional medical systems as a state of balance and wholeness. These systems are based on the belief that humans are unified with even the product of, the vast forces that maintain the cosmos. Illness is caused when one or more of these forces within a person is imbalanced. Medicine is a means of restoring balance."*

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