

Herbal Medicine in Shakespeare's England
From Dr. John Hall's Case Studies

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Who was John Hall: A most renowned 16th century physician-herbalist, born approximately 1575 and died in 1635. He moved to Stratford upon Avon, forever to be renowned as the home of William Shakespeare and the internationally renowned Globe theater. Around 1600, he established himself as a doctor in Stratford and as we all know, in those days, doctor really meant professional, clinical herbalist. John Hall was intimately bound up with his community (Stratford at that time had a population of only 2000) as a physician, citizen and a son-in-law of Shakespeare. At the age of 32, he married the eldest of Shakespeare's two daughters, Susanna who was then aged 24. Since Hall was only 11 years the junior of his celebrated father in law, married his most favored daughter and lived immediately next door as neighbors, with all the positive allusions to doctors and herbs throughout Shakespeare's plays, it is reasonable to assume that the two had a close friendship.

Shakespeare's "Pericles" was written in his last great creative phase around 1607 and around the time that Hall became a part of the Shakespeare family. In it he has a doctor character, Lord Cerimon who at one point states his creed of life as follows:

I hold it ever
Virtue and cunning were endowments greater
Than nobleness and riches. Careless heirs
May the two latter darken and expend,
But immortality attends the former,
Making a man a god. 'Tis know I ever
Have studied physic, through which secret
art,
By turning o'er authorities, I have
Together with my practice, made familiar
To me and to my aid the blest infusions
That dwells in vegetives, in metals, stones;
and I can speak of the disturbances
That Nature works, and of her cures;
which doth give me
A more content in course of true delight
Than to be thirsty after tottering honour

John Hall's father, William Hall was a man of some means, owning land in various areas. He was a Protestant by religion and a physician by profession. He had a large library of books on "physicks" and alchemy. It is surmised that he was trained by an Italian astrologer and physician who believed the origin of life was connected with the stars. In any case, his son, John who became a staunch Christian Puritan, had much discord with his father. This is adjudged by the fact that in his will, the father bestowed the books on "physicks" to John, but his books on astrology, astronomy and alchemy to his friend, Mathew Morris. The will specifically states that if John showed any interest in these subjects, Mr. Morris was to instruct John accordingly. As it turned out, Mathew Morris accompanied John to Stratford when they both moved to Stratford.

Medical practice during the Renaissance period was bound up with superstition, herb-doctoring and pure unabashed quackery. Considering the body of knowledge in his day, Hall evidences a high degree of therapeutic skill and care in his work. The names of specific diseases were not so well recognized at that time and so Hall reports cases in a complexity of signs and symptoms characteristic of the highest level of traditional herbalism. His therapeutic remedies consisted of various and elaborate prescriptions utilizing over one hundred separate botanicals. Hall's therapeutic armamentarium was typical of normal medieval and Renaissance medical practice that used leeches, bloodletting, elaborate herbs, minerals, purges, laxatives and a physiology based upon the Hippocratic humoral concept.

Despite this, Hall manifested a considerable degree of independent thought and judgment that elevated his standards above the medical practice of the day. He may have been a follower of Dr. Jacques Pons (1538-1612) of Lyons, who wrote a dissertation dedicated to Henry IV on the current abuse of blood-letting.

In his cases, Hall shows a high degree of compassion and sensitivity to emotional and psychological factors. His cures reflect the complicated pharmacy of the day, a materia medica that would rival or certainly be comparable to a Traditional Chinese Medical pharmacy today. We find him prescribing offensive animal matter (bat dung which is particularly high in vitamin A), webs of spiders, powder of nut shells, excreta, dried windpipes of cocks, etc.

Scurvy, a common disease of the day because of the prevalent diet of salt meat, salt fish, few vegetables and limited seasonal fruits was described by Hall as "general lassitude, filthy yellow jaundice, pains in the loins, weakness of legs, frequent changes of urine, tumors of the gums, swelling of the fingers, sweating and wandering pains." He treated his scorbutic patients with a mixture of plant and vegetable juices made from water cress, brooklime, scurvy grass, all herbs rich in ascorbic acid. Sometimes he made these into a beer, flavored with sugar, cinnamon or juniper berries or an infusion. Hall's treatment of scurvy was well in advance of his time and a hundred years before James Lind's use of lime juice for scurvy had caused a similar cure to Hall's.

Hall visited patients as far as forty miles from Stratford. Considering that horseback riding was the only means of transportation at the time, this evidenced quite a high level of commitment and care. On one occasion, Hall missed the Stratford council meeting and was duly fined because of choosing to answer the need of one of his patients.

Hall directed his son-in-law, Thomas Nash, to burn his manuscripts or dispose of them as he pleased. Apparently Nash and Susanna did not wish to burn them. A Dr. Cooke reports in the preface to the first edition of the "Select Observations" that in 1644 he was able to obtain two notebooks from Hall's widow.

The notes were abbreviated in Latin, Cooke took them to London to be evaluated by "an able doctor". The opinion was that the abbreviations would cause the translator considerable difficulty. Cooke assumed the task of translating Hall's notes from the condensed Latin. He did this with the help of Hall's apothecary, Richard Court, and in 1657 one of the notebooks appeared as "The Select Observations on English Bodies." Cooke's judgment was vindicated by Dr. John Bird who stated unequivocally that the cases "were equal to the best published." The range of conditions reported in the Casebook were incredibly wide and some of extreme gravity and complexity. These included abortion, asthma, dropsy, sterility, cancer, dysmenorrhea, melancholy, empyema, worms, and jaundice to name only a few.

The reprint of the 2nd edition of Hall's "Select Observations" was purchased by at Hall's Croft (home) in Stratford a few years ago. It was published with introduction and historical commentaries by Harriet Joseph, in 1964 on the occasion of the 400th anniversary of William Shakespeare's birth. Harriet Joseph was Associate Professor of English Literature at Pace University, Westchester, New York.

Since that time the manuscript passed through the hands of several collectors and now suitably kept in the British museum.

OBSERVATION XV

Mr. Hunt of Stock-green, aged about 46. Labouring of a grievous Scab and Itch, was thus helpt: prescription Fumitory, Borage, Bugloss, Scabious, Wormwood, of each a like quantity, as much as you please; draw out the juices, of which take boiling it in whey to the consumption of the whey, always scumming of it; after it is boiled suffer it to settle. Drink every day a good draught of it cold, with sugar. This is Syrup of Scabious by Johannes Anglici, and a secret by which he cured many of the Scab and which I have cured also.

Commentary: I have chosen this, one of the simplest of the 178 cases presented, first because I would like to learn more about John Hall and share a remarkable Western herbalist document, unique in my experience to the herbal literature and extremely valuable for those who can find the persistence and patience to overcome the quaint spellings, olde English and other charming antiquarian peculiarities, second because of its brevity; third, because it

describes herbs and a treatment modality that are both highly informative and accessible to contemporary herbalists. Last but not least is my search for remedies to give to my beloved 8 month old Labrador who seems to have some kind of allergic dermatitis which may just respond to this 16th century herbal remedy. This is obviously a very important 16th century formula from which contemporary herbalists can derive a good deal of knowledge and benefit not only to their human patients but also for pets with skin allergies which is an extremely common problem.

Following is a description of each of the herbs used in the formula:

Fumitory *Fumaria officinalis*

N.O. Fumariaceae

Saturn owns this herb and presents it to the world as a cure for his own disease, and strengthener of the parts of the body he rules. If, by my astrological Judgment of diseases, from the decumbiture, you find Saturn author of the disease or if by direction from a nativity you fear a Saturnine disease approaching, you may by this herb prevent it in the one, and cure it in the other, and therefore it is fit you keep a syrup of it always by you. The juice or syrup made thereof, or the decoction made in whey by itself, with some other purging or opening herbs and roots to cause it to work the better (itself being but weak) is very effectual for the liver and spleen, opening the obstructions thereof, and clarifying the blood from saltish, choleric, and adult humours, which cause leprosy, scabs, tetter, and itches, and such like breakings-out of the skin; and, after the purgings, strengthens all the inward parts. It is also good against the yellow jaundice, eradicating it by urine, which it procures in abundance. The powder of the dried herb, given for some time together, cures melancholy, but the seed is strongest in operation for all the former diseases. The distilled water of the herb is also of good effect in the former diseases, and conduces much against the plague and pestilence, being taken with good treacle. The distilled water also, with a litle water and honey of roses, helps all the sores of the mouth or throat, being gargled often therewith. The juice dropped into the eyes, clears the sight, and takes away redness and other defects in them, although it procures some pain for the present, and causes tears. Dioscorides says, it hinders any sreth springing of hears on the eye-lids (after they are pulled away) if the eye-lids be anointed with the juice hereof with gum arabic dissolved therein. The juice of Fumitory and docks mingled with vinegar, and the places gently washed or wet therewith, cures all sorts of scabs, pimples, blotches, wheals, and pushes which rise on the face of hands, or any other parts of the body.

Commentary: This is a primary ancient herb for blood purification through liver detoxification. The name derives from the Latin "Fumu" which means smoke, and refers to the fact that this common European weed is irritating to the eyes when it is burned. It is a member of the poppy family which is particularly rich in alkaloids the major one in this family being fumarine. The irritant principle is fumaric acid.

Recent studies have shown that fumitory has remarkable effects on the bile ducts. It seems that a water infusion of the plant given intravenously increased bile flow where bile secretion was low prior to the injection. Conversely, if the gall bladder was hyperactive, bile flow was reduced. With no effect on a normal gallbladder. Thus it has a unique regulating effect on the bile system. French authors have coined this as an 'amphicholeretic agent'. Contemporary clinical trials have confirmed the biliary activity of fumitory in the treatment of acute conditions such as biliary colic as well as chronic dyskinesia (pain that occurs with movement). It is especially effective of course for pain in the liver and chest. especially over the right epigastrium. It is specific for migraine and other related headaches caused by liver and gastrointestinal malfunction. Fumitory can be used to increase one's tolerance of rich foods, to treat headaches, nausea and vomiting.

Its use in this formula points out the strategy of treating allergic dermatitis and other chronic skin disorders with an effective liver and bile regulating approach.

Borage *Borago officinalis*

N.O. boraginaceae

It is an herb of Jupiter, and under Leo. The leaves are accounted cordial, good to comfort the heart, and remove faintness and melancholy, and for that purpose the tops are frequently put into wine and cool tankards; by which light cold infusion, its virtues are completely obtained. A conserve of the flowers, with the flowers of bugloss, is good in white wine to bring down the menses. some make a syrup of the flowers, which is very good for coughs, short breaths, or to sweeten herb-teas for feeble, weak, and consumptive persons. distilled water of borage or Bugloss flowers, for their virtues are similar, are good for inflammations of the eyes; and, inwardly, may be given in fevers with safety.

Commentary Jupiter is hot and moist and Leo assigns it to diseases of the heart. The astrological assignment, however is not because it is because of the expansive quality that is associated to these signs and not their customary atmospheric properties. From its indications as a demulcent cooling agent for fevers and lung inflammations, it certainly could not be considered to be hot and moist.

Borage is specific as a cordial which according to Parkinson is used "to expel pensiveness and malanchollie." It has diuretic, demulcent and emollient properties. According to Grieve, it seems to contain potassium and calcium, combined with mineral acids. The fresh juice supplying 30 percent potassium and the mucilage a good amount of niter and sodium. It is from the presence of these saline qualities along with calcium that its benefit on the heart derives. Because of the presence of nitrate of potash, it will emit sparks with a slight explosive sound when burnt.

The saline constituents promotes kidney activity and helps it to filter and carry off toxins. The high amount of potassium, calcium and other salts is what makes this herb uniquely of benefit to the heart.

Bugloss (Garden bugloss) (*Buglossum hortense*) (Viper's bugloss) *Echium vulgare*

N.O. Boraginaceae

It grows under the dominion of Jupiter in Leo; like Borage, is accounted cordial, and serviceable to raise the spirits, and are therefore good in hypochondriac, hysterical, and all disorders arising from lowness of spirits. The flowers are ranked among the cordial flowers. The leaves and roots are to Very good purpose used in putrid and pestilential fevers, to defend the heart, and help to resist and expel the poison, or the venom of other creatures; the seed is of the like effects: and the seed and leaves are good to increase milk in women's breasts; the leaves, flowers, and seed, all, or any of them, are good to expel pensiveness and melancholy; it helps to clarify the blood, and mitigate heat in fevers. The juice made into a syrup, prevails much to all the purposes aforesaid, and is put with other cooling, opening, and cleansing herbs, to open obstructions, and help the yellow-jaundice; and, mixed with fumitory, to cool, cleanse, and temper the blood thereby; it helps the itch, ringworm's, and tetter, or to either spreading scabs and sores. The flowers candied or made into a conserve, are helpful in the former cases, but are chiefly used as a cordial, and are good for those that are weak in long sickness, and to comfort the heart and spirits of those that are in consumption, or troubled with often swoonings, or passions of the heart: the distilled water is no less effectual to all the purposes aforesaid, and helps the redness and inflammations of the eyes, being washed therewith; the dried herb is never used, but the green; yet with ashes thereof, boiled in mead, or honied water, is available against the inflammations, and ulcers in the mouth or throat to gargle it therewith: the roots of Bugloss are effectual, being made into a licking electuary for the cough, and to condensate thick phlegm, and the rheumatic distillations upon the lungs.

Commentary Jupiter is by nature hot and moist. It is described in Grieve's as diuretic, demulcent and pectoral. It has very similar to properties as borage. Both herbs seem to have beneficial effect on the emotions, heart and for sadness, melancholy and sadness. It is also highly regarded as an anti-poison herb which is what makes it particularly useful in this formula.

Scabious, Devil's Bit

N.O. Compositae

Scabious of which Culpepper describes three varieties known at the time as *Scabiosa Arvensis* (Field scabious), *S. succisa* (Devil's bit Scabious), *Scabiosa columbaria* (Lesser Field Scabious)

Only the properties of the last variety are described and one can only assume that all three are similar. He says it is different from the previous two in that it is smaller. He says there are actually many varieties of Scabious and that at least at that time it grew in dry fields and meadows around London, everywhere (imagine that!).

He says it is ruled by Mercury. Very effective for coughs, shortness of breath and all other diseases of the breast and lungs, ripening and digesting cold phlegm, and other tough humours, voiding them forth by coughing and spitting: it also ripens all sorts of inward ulcers and imposthumes, pleurisy also, if the decoction of the herb dry or green be made in wine, and drank for some time together. Four ounces of the clarified juice of Scabious taken in the morning fasting, with a dram of Mithridate or Benice treacle, frees the heart from any infection of pestilence, if after the taking of it, the party

sweat two hours in bed, and this medicine be again and again repeated, if need require. The green herb bruised and applied to any carbuncle or plague-sore, is found by certain experience to dissolve and break it in three hours space. The same decoction also drank, helps the pains and stitches in the side. The decoction of the roots taken for forty days together, or a dram of the powder of them taken at a time in whey, does (as Matthiolus says), wonderfully help those that are troubled with running or spreading scabs, tetter, ringworms, yea, although they proceed from the venereal disease, which, he says, he tried by experience. The juice of decoction drank, helps, also scabs and breakings out of the itch, and the like. The juice also made up into an ointment and used, is effectual for the same purpose. The same also heals all inward wounds by the drying, cleaning, and healing quality therein: and a syrup made of the juice and sugar, is very effectual to all the purposes aforesaid, and so is the distilled water of the herb and flowers made in due season, especially to be used when the green herb is not in force to be taken. The decoction of the herb and roots outwardly applied, does wonderfully help all sorts of hard or cold swellings in any part of the body, is effectual for shrunk sinews and veins, and heals green wounds, old sores and samphire, cleanses the skin of the face, or other parts of the body, not only from freckles and pimples, but also from morpew and leprosy; sores, itch, and the like, used warm. The herb bruised and applied, does in a short time loosen and draw forth any splinter, broken bone, arrow-head, or other such thing, lying the flesh.

Commentary: Mercury is by nature cold and dry in the first and second degrees. According to Grieve, the name Devil's bit comes from the appearance of the root which when fully grown, nearly to the thickness of a middle finger, ends so abruptly that it appears to have been mysteriously bitten off.

Gerard says:

"The greater part of the root seemeth to be bitten away; old fantastick charmers report that the devil did bite it for envie, because it is an herbe that hath so many good vertues and it is so beneficial to mankinde.'

Obviously from the above, scabious is expectorant, alterative, vulnerary and astringent. It is particularly effective for all skin problems as well as the lungs. It is an herb with closely synergistic properties to borage but with stronger purifying and detoxifying effects.

Wormwood (*Artemisia vulgaris* is common mugwort) while *Artemisia absinthium* is common wormwood)

It is a martial herb, under the dominion of Mars. This is generally believed to be the *absinthium ponticum* of the ancients, the best Wormwood being supposed to grow in Pontus, a country of the Lesser Asia. the tops of the plant are to be used fresh gathered; a very slight infusion of them is excellent for all disorders of the stomach, and will prevent sickness after meals, and create an appetite; but, if it is made too strong, it will revolt and disgust the taste.

The tops with the flowers on them, dried and powdered are good against agues, and have the same virtues with wormseed in killing worms: in fact, they are much better than the wormseed that is commonly sold in the shops, which is generally too much decayed. The juice of the large leaves of Wormwood, which grow from the root, before the stalk appears, is the best against the dropsy and jaundice, for it opens obstructions, and works powerfully by urine. It is good in all agues, for which it

is given in decoction, or infusion, in water, ale, wine, or in the juice only; but its infusion in wine or ale (if disease will allow of malt liquors) is an easy, and as good a preparation as any. Its simple distilled water is good for little. There is little more in its salt obtained by incineration, than in any other lixivial salt. Its decoction, wine, extract, and both oils, are good, and its compound water not bad. Its juice is more water and detergent the herb more astringent, only the dried herb should be infused in wine or ale. The infusion, drank evening and morning for some time, helps hysterics, obstructions of the spleen, and weakness of the stomach. Its oil, taken on sugar, and somewhat drank after, kills worms, resists poison, and is good for the liver and jaundice. The use of the herb checks the head and eyes, like the leaves; hence the root should be accounted among the best stomachics. Oil of the seed, given from half a scruple to half a dram, in some liquor, or a spoonful of juice in some wine, taken before the fit comes on, and the person is put to bed, cures quotidian and quartans. In a looseness from eating too much fruit (after the use of rhubarb) wormwood wine is excellent.

A woman raised spread, and maintained her reputation for the cure of a megrim, by only using a fomentation of the part, of green roots of wild cucumber sliced, and wormwood, of each alike, boiled in two parts water and strained, has been successfully applied to a spreading gangrene. Green wormwood, worn in the shoes, has ben found useful in cold distempers of the stomach. Its ashes, infused three hours in white wine, strained, and drank often, cures and anasarca. Whenever you have any great expectation from the use of Wormwood, always order the common sort, for the roman comes far short of it in virtue. That hot rheum which runs down from the eyes, and excoriates the skin of the cheeks, is cured by juice of wormwood beaten up with the white of an egg, and applied. A too habitual and free internal use of the herb dims the sight for some hours.

Poultices of wormwood boiled in grease, barm, or wine, may be applied with good success to white swellings. Being boiled in lard, and laid o swellings of the tonsils and quinsy, is serviceable. a poultice of the soft leaves, beaten up with whites of eggs, is good in a strain; or if it is boiled in ale, and laid on; or a poultice of wheat-bran boiled in vinegar; or a tincture of dried roses in vinegar, used with wet clothes to the part. Its internal use is good in such diseases as come from a gross blood, or obstructions in the capillaries, or in viscosity's, or phlegm, which line the insides of the stomach, bowels or vessels, or in too great a sharpness of the blood, by its opening obstructions, cleansing, bracing, and promoting perspiration and urine. It is admirable against surfeits. It not only cures pain of the stomach, weakness, indigestion, want of appetite, vomiting and loathing, but hard swellings of the belly. This, with rosemary, saffron, and turmeric root infused in rhenish wine, is a cure for the jaundice, and brings down the menses; or a decoction of it, broom tops, greater celandine, white horehound, lesser centaury, flowers of hypericon, barberry bark, turmeric, and madder roots, strained, and hog-lice wine added, is not ill in a jaundice. wormwood and vinegar are an antidote to the mischief of mushrooms and henbane, and to the biting of a shrew, and of the seafish called *Draco marinus*, or quaviver; mixed with honey, it takes away the blackness after falls, bruises, etc. All other wormwoods, the nearer the approach and taste to pleasant or palatable, they are so much the worse, for they are weaker, their use requires so much longer time, larger doses, and yet less success follows. The herb and pellitory of the wall boiled in water till soft, then strained, and a fomentation of the liquor used, and the herbs laid on after in a poultice, ease all outward pains; or the herb boiled in oil till almost the oil is wasted, strained, and anointed, cures the pain of the back,

placed among woolen cloths, it prevents and destroys moths.

Commentary

Its assignment to Mars describes it as archetypically hot and dry to the 3rd and 4th degrees. The description of Wormwood (actually mugwort) reminds us of the power of the simplest of herbs. To paraphrase, "the better it tastes, the weaker and more ineffective it is".