

Gold, frankincense and myrrh

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'Behold, there came wise men from the east . . . they saw the young child with Mary his mother, and fell down, and worshipped him: and . . . presented unto him gifts; gold, and frankincense, and myrrh.'¹

These treasures have been valued for their sacred and ceremonial uses since long before biblical times to the present day. They have also been used as medicines.

Gold

Potable gold, the elixir of life which would cure all known diseases and confer immortal youth, was sought by alchemists for centuries. Alchemy was founded by Jabir ibn Hayyan (702-765). Neither he nor his followers were successful in transforming base metals into gold (*Sol* or *Rex metallorum*)².

By the 17th century, the scientific study of chemistry had begun to oust the astrological aspects of alchemy. However, golden medicines were still fashionable.

'Gold, is temperate in quality, it wonderfully strengthens the heart and vital spirits . . . in Cordials it resists melancholly, faintings, swoonings, feavers, falling-sickness, and all such like infirmities'

"For Gold is cordial; and that's the reason,
Your raking Misers live so long a season."³

However, in 1719, John Quincy puts the use of gold in medicine firmly in its place.

'What should have been the principal Inducement of torturing the Metal with so much Violence, to obtain from it some medicinal Virtues, is not easily to be guess'd; unless it was to keep up the Authority of an ill-deserv'd Regard . . . Most indeed acknowledge, that Gold in Substance . . . is not digestible in the Stomach, so as to be transmitted into the Blood, and to be there of any Efficacy.'⁴

So how was gold prepared and for what was it prescribed? One method was to amalgamate the gold with mercury and reduce it into 'an impalpable powder'. Saffron of gold or *aurum fulminans* was made by pouring *aqua regalis* (hydrochloric acid), water and oil of tartar onto thin plates of gold. Then 'dry it on a Paper by a gentle Fire lest it explodes (!)' Saffron of gold was 'said to cause Sweat, and drive out noxious Humours . . . It may be given in the Small-Pox and Measles; and is also reported to stop Vomiting, and . . . to be useful in lowering a salivation.' But someone 'of the first Rank of Ignorance and Confidence, has . . . amongst his Worm-Advertisements, frequently made mention of a tincture of Antimony with Gold. its only justifiable use is to beautify some Medicines to the eye, and guard the Palate against the Nauseousness of some others.'⁴

In 1839 gold was still prescribed to promote the secretions of the skin, salivary glands and kidneys. The terchloride (an updated saffron of gold), teroxide, iodide and tercyanide were used in the treatment of the secondary symptoms of syphilis, scrofula, chronic skin diseases and scirrhus tumours, and applied

locally to ulcerations of the uterine cervix and face. Auro-terchloride of sodium mixed with orris powder or lycopodium, was rubbed on the tongue and gums. A lard based ointment was applied endermically (i.e. to skin deprived of its epidermis by blistering). Aurate of ammonia was used in fevers and 'nervous affections'. However, it was recognized that gold occasionally 'produced very serious and even fatal results' including 'violent gastritis, obstinate sleeplessness and fatiguing erections.'⁵

At the end of the 19th century gold compounds were no longer officially recognized in Britain. Chloride of gold and sodium was used on the Continent 'in tertiary syphilis, spinal sclerosis, hystero-epilepsy, asthma, chorea, and in uterine affections.' Hysteria and epilepsy were also treated with gold bromide⁶.

The 20th century saw a new use for gold in the fight against tuberculosis. Sanocrysin (the double thiosulphate of gold and sodium) was first prepared by Moellgaard in 1923. By 1946 intramuscular injection was 'advocated in exudative or fibro-caseous cases where toxæmia is mild and where the disease is slowly progressing.' Weak solutions of gold inhibited the growth of tubercle bacilli in culture. Complications of gold administration were fully recognized - 'stomatitis, glossitis, jaundice, leucopenia, erythema of the skin, hæmaturia or more than a faint trace of albumen in the urine should be a sign to stop the treatment permanently.'

Forestier introduced gold treatment of rheumatoid arthritis in 1930. 'Beneficial results can be expected in about 70 percent of cases . . . This improvement warrants the exhibition of gold salts despite the attendant risks.'⁷ Myocrisin (sodium aurothiomalate) is currently recommended for 'severe active or progressive rheumatoid arthritis, palindromic rheumatism, juvenile chronic arthritis (Still's disease)'.⁸

Frankincense

Frankincense is a gum-resin obtained from several species of *Boswellia* trees. The highest quality comes from southern Arabia, from Dhofar in Oman. Other sources are Somalia and India. The bark of the tree is scraped with a knife so that the gum-resin oozes out as milky droplets which gradually dry in the sun. The first scrapings are thrown away and only the second or preferably third are harvested⁹. Frankincense or olibanum occurs in small, brittle, ovoid tears. 'They are usually of a pale yellowish colour, frequently with a greenish, blueish, or reddish tinges . . . opalescent and translucent.'¹⁰

Between 2000 and 3000 BC South Western Arabia was occupied by the Sabaeans who exported frankincense first to Egypt and, later, to the Parthian and Roman Empires. Frankincense was mainly burnt as an aromatic. In one year around 1200 BC the Temple of Amon in Thebes used 2189 jars and

304 093 bushels of fragrant resins¹¹. By the year 200 frankincense export exceeded 3000 tons per annum - a lucrative trade. But apart from its heady and somewhat hypnotic scent (useful to mask the smell of cremations and mummification processes), frankincense was used medicinally. The Nubians chewed it for sore mouths. It was advocated for gout and 'broken heads'⁹. Dioscorides ('The Master of Those Who Know') in the sixth century suggested frankincense mixed with leek juice to stop bleeding - especially epistaxis¹².

Culpeper recommends frankincense to 'Heat, and Bind, fill up old Ulcers and flesh, stop Bleeding, but is extrem bad for mad people'¹³. Quincy says of olibanum that 'it is very glutinous, and consequently . . . it is used in some compound strengthening Plasters'. He also noted that it made the urine smell¹⁴. By 1909 its use (other than as incense) was still as an ingredient of plaster, and also for fumigating pastilles¹⁰.

Nowadays the Arabs use frankincense in three forms: the tears described above for incense burning, an amber powder boiled as an infusion for gastric disturbances, and white shihri which is chewed (presumably as it was several thousand years ago). 'It is good for the teeth and gums and helps clear the brain'⁹.

Myrrh

Myrrh is also a gum-resin, obtained from the shrub-like tree *Balsamodendron myrrha* which grows in North East Africa and Arabia. In older writings, especially herbals, it may be confused with sweet cicely or *Myrrhis odorata*. It occurs in

'irregular rounded tears . . . varying in size from small grains up to masses nearly as large as the fist . . . They have a reddish yellow or brown colour and a rather dull, dusty surface . . . The drug has an agreeable aromatic odour and an aromatic, bitter and acrid, but not unpleasant taste'¹⁵.

Myrrh was grown in the Nubian desert for its astringent, antiseptic and aromatic properties and later was also cultivated by the Sabaeans¹¹. It was used in the mummification of Egyptian Pharaohs and as the central ingredient of the holy anointing oil of the Old Testament Jews⁹. Culpeper advocates 'Oyl of Mirrh' to keep wounds from putrefaction, induce labour and placental delivery, kill worms, treat coughs and hoarseness, help a stinking breath and fasten the teeth. He also dropped it into the ears to cure deafness¹⁶.

In the 18th century myrrh was still considered an important drug.

'It is warm and bitterish, and . . . helpful to the Stomach. In malignant and pestilential fevers, it has always been reckon'd excellent; and in times of the Plague, People carry it, and chew it in their Mouths to prevent Infection. It is of manifest Service in ripening the Small-Pox . . . in abating that Restlessness which arises from tickling Defluxions of Rheum . . . and good in all Catarrhs. Its peculiar Bitterness makes it effectual against Worms . . . Surgeons much use it now in their Dressings . . . for keeping clean the Tendons and Periostium, and many kinds of Ulcers. It is also an excellent Dentifrice, and keeps the Gums from wasting and stinking . . . but its most celebrated Virtues are . . . being both a great Cleanser and Strengtheners of the Womb. It provokes the Menses, and forwards Delivery; and is indeed good in all hysterical Affections.'¹⁷

Indications are virtually identical to those described by Culpeper 60 years earlier, and Arabians still use it today for 'female disorders'.⁹

But Quincy had another use for the beauty conscious.

'Oleum Myrrhae per Deliquium. Boil Eggs till they are hard, split them in the middle, and take out the Yolks: fill the Cavity with fine Myrrh in Powder; place them upon little Sticks . . . set them in a clean Pan in a Cellar . . . and there will drop from them into the Pan a Liquor, which is call'd Oil of Myrrh. This is us'd only externally to take off Blemishes and Spots on the skin, and is commended to be excellent for such purposes.'¹⁸

A universal fortification

But surely what we need in modern medicine is the compound advertised in The London Dispensatory which proclaims:

'The vertues, Use and Variety of operations of true and Phylosophical *AURUM POTABILE*. Now made and sold by Dr Freeman, as also by Dr Harrington, and me Nicholas Culpeper, in Spittle-fields, on the East Side, next door to the Red Lyon.' This 'cures all agues, whether Quotidian, Tertian or Quartan . . . the most horrid, putrid Fever . . . it hath beyond all hopes by external applications on the stomach, revived them from death: It cures the Gout . . . It causeth Women subject to Abortion or Miscarriage to go to their times, and yet being administered when the time comes it causeth a speedy and easie delivery . . . It both binds and stops fluxes, yet purges, both Vomits, and staies vomiting: it causes sweat, yet cures preternatural sweating, and performs all its operations as Nature herself would have it . . . To conclude, It's a Universal Fortification for all Complexions and Ages, against all sorts and degrees of pestilential and contagious infection, both preventing before their possession and extirpating of them after it.'¹⁹

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