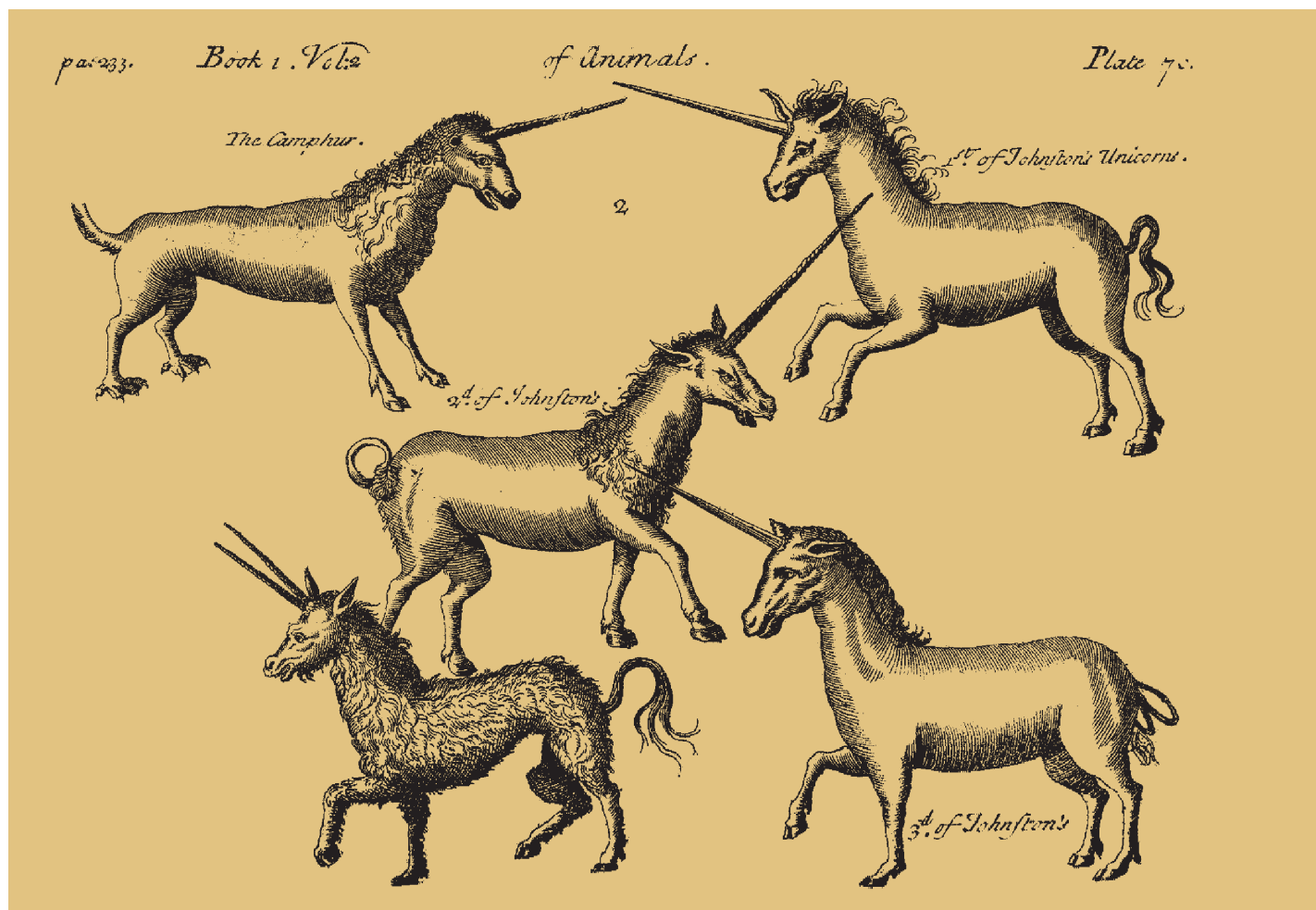


The use of unicorn horn in medicine

In this article, William Jackson writes about the myth of the unicorn and the use of its horn in medicine



Unicorns as illustrated in Pommet's *Compleat History of Druggs*, 1712

The unicorn is a mythical beast that has been associated with medicine and pharmacy for hundreds of years. It was said to resemble a horse that had a single spirally twisted horn projecting from its forehead. Its origin has been the subject of a great deal of speculation but I should like to believe the story that dates it from the time of Alexander the Great (356–323 BC). It is said that his stallion, Bucephalus, wore golden horns in battle and that this gave rise to the legend of the unicorn. Unfortunately, Bucephalus was black and unicorns were said to be white. Another possibility is that their existence could be based on early reports of the rhinoceros, though belief in unicorns was still prevalent when this beast was relatively well known. There were also reports of an animal called the monoceros and, although this was thought by some to be another name for the unicorn, others believed it to be the rhinoceros, and yet others considered it to be a species distinct from either of these.

Medieval bestiaries

Descriptions of the unicorn are to be found in bestiaries (books that contained illustrations and descriptions of many species of animals, both real and imaginary) of the 12th and 13th centuries. The unicorn is unusual among the mythical animals in that people still believed in its existence up to and after the Renaissance. One manuscript said that it was sufficiently fierce to kill an elephant by stabbing it with its horn, and a drawing showing the two animals engaged in combat depicts the unicorn as being considerably larger than the elephant. According to another story, the unicorn was so swift that hunters were unable to catch it, except by using a subterfuge — a young virgin was sent into the forest where the unicorn was known to exist and, when it saw her, it would leap into her lap and the hunters could then capture it.

The monoceros also had a single horn, up to four feet in length. It was larger than the unicorn, with feet resembling those of an elephant and a tail like a stag. It was possible to kill one, but none had ever been taken alive. Some French bestiaries considered the unicorn and monoceros to be a single species.

The price of the horn

The sums quoted for the price of unicorn horn vary considerably, and the problem of estimating its value is compounded by the differing dates and by the varying currencies that are quoted. However, there can be no doubt that, although the price varied from time to time, it was never cheap. In 1609, Thomas Decker speaks of the horn of a unicorn as being worth “half a city” and a Florentine physician observed that it was sold by the apothecaries for £24 per ounce. In 1553, one belonging to the King of France was valued at £20,000 and the value of one specimen in Dresden in the same century was estimated at 75,000 thalers.

Obviously, unicorn horn was not something that was normally owned or used by poor people. It was its alexipharmic properties that were thought to be of particular use, and the fact that rich and powerful people were in the greatest danger of being poisoned ensured that there were always sufficient customers with enough money to maintain its high price. Considerable amounts would also be paid by collectors of curiosities for particularly fine specimens.

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Medicinal virtues

The first mention of the therapeutic properties of unicorn's horn is thought to have been by Ctesias, a Greek physician from Cnidus, who flourished in the fifth century BC. He believed the unicorn was an Indian wild ass that had a horn growing from its forehead. Drinking cups made from this horn could neutralise poison and afford protection against convulsions and epilepsy. In the middle ages it was used to cure plague, fevers and bites from serpents and mad dogs. It was even said that poisoned wounds could be cured merely by holding a piece of the horn close to them. Surely we cannot fail to be impressed when we read in 'Doctors and Doctors' by Graham Everitt that the unicorn was: "... perfectly conscious of the sanitary virtues which resided in its nasal protuberance, and would dip its horn in the water to purify and sweeten it ere it would drink."

Mary Stuart (1542–87), Queen of Scots was the widow of Francis II of France. Later she married Lord Darnley and, in 1565, gave birth to a son who became James VI of Scotland. She had brought a piece of unicorn's horn from France and used it to test her food for poison. Unfortunately it did not prevent her developing rheumatic gout and dropsy later in life, nor did it protect her from the executioner's axe when she was beheaded at Fotheringhay Castle in 1587.

In a letter written to Monsieur Belin in October 1631 Guy Patin, the Parisian physician, observed that he did not believe that unicorn's horn was of any use as protection against the pestilential disease that was prevalent in the city at that time, nor did it possess any of the occult properties attributed to it.

Unicorn horn was also an ingredient in a remedy for the bite of a mad dog that was published in 1656: "Take a handful of Box, and stamp it, and strain it with a draught of milk, put into it a pretty quantity of Lobsters shell beaten to a powder, and some Unicorns horn, if you can get it, and drink thereof and wash the wound therewith."

The scarcity of unicorn's horn is indicated by the phrase "if you can get it".

William Salmon's 'Pharmacopoeia Londinensis or the New London Dispensatory' of 1678 said that although many were dubious about the existence of the unicorn, their doubts could have no foundation because it was mentioned in the "holy writings". However, the country of its origin was dubious and Salmon mentioned a number of authorities that quoted widely differing places, including the West Indies, Ethiopia, Asia and the East Indies, though he reached no conclusion about the validity of any of these claims. Ludovicus Vartoman had described two beasts that had been presented to the "Great Turk" by the King of Aethiopia. Both had yellowish horns in the middle of their foreheads, a deer's head and cloven hooves. Finally, he observed that the horn was the only part that was used medicinally being "alexipharmick" (counteracting poisons) "sudorifick" (causing sweating) "cardiack" (a cor-

dial restorative) "antifebricitick" (reducing fevers) and "cephalick" (counteracting disorders of the head). He added: "It potently resists Plague, Pestilence, and Poyson, expels the Measles and Small-Pox, and cures the Falling-Sickness in Children." The dose to be used was 10 grains to a drachm (60 grains) or more.

In 1695, Nicholas Culpeper observed: "Unicorns horn resists Poyson and the Pestilence, provokes Urine, restores lost strength, brings forth both Birth and Afterbirth." Obviously Culpeper had no doubts about the medicinal value of unicorn's horn although suspicions about its efficacy as well as its origin had been growing for some time. The



Tin-glazed earthenware pill tile bearing the arms of the Worshipful Company of Apothecaries

Museum of the Royal Pharmaceutical Society of Great Britain

The unicorn in art and heraldry

Probably the most famous representations of the unicorn are those that appear in a set of six tapestries in the Musée National du Moyen-Age, Paris. The tapestries were woven about the end of the 15th century, and found in rather poor condition in 1841 in Boussac. Fortunately, they were purchased by the French government in 1882 and restored. Five of them represent the senses: l'odorat (smell), l'ouïe (hearing), le goût (taste), la vue (sight) and le toucher (touch). The final one takes its name from the words that appear on a tent in the centre of the tapestry, "À Mon Seul Désir (To my one desire)". They are superbly displayed and are objects of great beauty.

At the other end of the artistic scale, though not without its own naive charm, there is a polychrome charger or large dish made from tin-glazed earthenware in the Bristol City Art Gallery (artist unknown) that illustrates a unicorn with a spotted coat and a yellow mane and tail in a landscape with trees.

Images of the unicorn are frequently to be found in heraldry. In the reign of James III of Scotland (1460–88) a gold, undated coin with a value of 18 Scottish shillings was introduced. It was known as a "unicorn", and a smaller "half-unicorn" worth nine shillings was also made. On one side, the shield of Scotland was supported by a unicorn. When James VI of Scotland became James I of England (1603) the red dragon, one of the supporters of the Royal Coat of Arms, was replaced by a unicorn.

The coat of arms of the Worshipful Society of Apothecaries of London, founded in 1617, had two unicorns as supporters, and they can also be seen on some armorial drug jars and on a number of delftware pill tiles. The society's charter was granted by James I, and it is possible that the Scottish unicorns were adopted as a compliment to

the king. As well as armorial jars, the head of the unicorn was used as a decorative motif above the cartouche of a rare drug jar design, probably made in the second half of the 17th century. One of these can be seen in the Museum of London.

The Golden Unicorn Pharmacy was founded in Debrecen in Hungary, and had a semicircular wreath of wrought iron over the door, bearing the date 1772. In the centre of this was the figure of a prancing unicorn with a long horn. The furnishings of this handsome pharmacy are now preserved in the city's Déri museum.

In 'Aus alten Apotheken' there is a photograph of the sign of the former Klosterapotheke (Cloister pharmacy) in Rottenbuch, Germany, showing a projecting unicorn's head with a long horn, dating from circa 1750. The caption indicates that the horn could be the tusk of a narwhal. The same book contains a photograph of a wooden drug jar and a chipwood box that were containers for the prepared horn.

Narwhal tusks are also to be found in 18th century caricatures, such as The inspection (plate III of Marriage-à-la-Mode) by Hogarth where one can be seen in the house of Dr Misaubin (also known as M de la Pillule). Here, it is a reference to its use as a symbol of a quack doctor and its alleged value as an aphrodisiac.

In contrast, Sir Henry Wellcome chose the unicorn as the house mark of Burroughs Wellcome & Co, possibly because it was a symbol of purity and because of its early use as an important antidote to poisons. The mark was designed by a Mr Scobie of the College of Heraldry, but required several modifications before it was approved by Sir Henry and registered in 1908. It remained unchanged for 60 years but was updated to a sleeker version in 1968.

Narwal horn was sold as unicorn horn

phrase “restores lost strength” is a reference to its supposed value as an aphrodisiac.

At the end of the 18th century the French physician, Pierre Pomet, dealt with the subject at some length. He observed that the truth about unicorns was still unknown, but described and illustrated several beasts from which the tales about it could have been derived. The camphur was a wild ass found in Arabia that had a horn used to cure several diseases, especially venomous or contagious ones. The Arabs who lived near the Red Sea knew of the pirassoupi, a hairy animal about the size of a mule that had two long, straight, spiral horns. These were infused in water for six to eight hours and the resulting liquid was drunk to cure wounds or venomous bites. This beast was probably included despite its possessing two horns because of the recorded use of them as an alexipharmic.

Pomet illustrated three unicorns described by Johnston in his ‘*Historia naturalis*’.¹ He observed, inaccurately, that there were five beasts with a single horn and that one must be the true unicorn. These were the “Orix, or one-horn’d wild goat”, the “one-horn’d Ox”, the “Hart with one Horn”, the “one horned Hog” and the “one horned Ass”. He mentioned that the people of India made drinking vessels from the horn of the latter, and that they freed anyone drinking from them from any sort of deadly poison or infection. It would seem that Pomet believed that unicorns did exist, though he stated categorically: “I shall only say, that what we sell under the Name of Unicorn’s Horn is the Horn of a certain Fish, by the Islanders called Narwal, or the Sea Unicorn.” He said that authors had ascribed almost incredible things to it, chiefly as a remedy for poisons, plague and fevers, and the bites of serpents or mad dogs. It was used as a cordial or restorative, shavings of it being boiled up in a broth and coloured with a little cochineal and saffron to make a jelly.

Pomet also noted that the narwhal, also known as the rhoar or sea unicorn, a large fish that some reckoned to be a sort of whale, was found in the northern seas especially along the coast of Greenland. It carried a spiral horn at the end of its nose that could be seen in some cabinets of curiosities. Pieces of this horn were sold in Paris as true Unicorn’s horn that was said to have many virtues, but he could neither authorise nor contradict

these reports because he had not sufficient experience of its use. He also wrote of another “fish” called the sea unicorn that had been stranded on a beach on an island near Santo Domingo. It was about 18 feet long and had a spirally twisted horn (or tusk) that became smoother as it diminished in circumference. This measured nine and a half feet in length. A feature of this creature that is shown in an illustration is that on its head there was “a Kind of Crown rais’d above the rest of the Skin, two inches or thereabout, made in an oval Form, and ending in a Point”. It seems highly probable that the drawing was made from a description rather than being taken from life.

Pomet also quoted Nicolas Lemery, a doctor of medicine, as saying that the narwhal carried a spiral horn, five or six feet in length, with which it would attack the largest whales. This horn yielded a great deal of volatile salt and oil that was cordial, sudorific and useful to resist infections and cure epilepsy. The dose was from 10 to 40 grains. In addition, people wore it in amulets hung round the neck to resist infection.

By the middle of the 18th century the value of the horn as a medicine was almost completely discredited. In 1749 John Quincy wrote: “There are various opinions concerning this creature; but Paccius, who wrote a whole treatise about it, takes it to be nothing but the rhinoceros; tho’ some strenuously contend that this horn is the tooth of a fish. The strange conceits of the medicinal virtues of this drug, are too numerous and too ridiculous to mention here; and both this and the following are now justly expelled the present practice.” The next preparation was Bone of a Stag’s Heart, another ancient remedy.

By 1836, in spite of the fact that unicorn horn had been discredited for many years, we can still find an entry in Gray’s ‘A treatise on pharmacology’ that reads: “NARWHAL, Unicorn fish, *Monodon vulgaris*. TUSK, unicorn’s horn, *cornu unicornu*, *C. monoceratis*. A very fine ivory: yields blubber.”

Conclusion

As with so many remedies, such as bezoar stones, powdered mummies, toads and goat’s blood, that had been used from ancient times, unicorn’s horn continued to enjoy a reputation as a powerful medicinal agent for a

considerable time after doubts were raised about its value. Together with many other discredited animal products it was still used after the middle of the 18th century, though by this time it was well known that it was really the horn of the narwhal and, like other forms of ivory, was of little use as a curative agent.

Bibliography

- Bryant M. *Private Lives*. London: Cassell; 1996.
- Payne A. *Medieval beasts*. London: The British Library; 1990.
- White TH. *The book of beasts, a translation from a Latin bestiary of the twelfth century*. New York: G P Putnam’s Sons; 1954.
- Britton F. *English delftware in the Bristol collection*. London: Philip Wilson Publishers Ltd for Sotheby Publications; 1982.
- Fotheringham B. *The unicorn and its influence on pharmacy and medicine*. *Pharmacy History Australia* 2000;10:3–7.
- Wootton AC. *Chronicles of pharmacy*. London, Macmillan and Co Ltd; 1910.
- Copeman WSC. *The Worshipful Society of Apothecaries of London*. London: The Worshipful Society of Apothecaries; 1967.
- Britton F. *London delftware*. London: Jonathon Horne; 1987.
- Nékám L. *Old hungarian pharmacies*. Budapest: Corvina Press; 1968.
- Stafski H, *Aus alten Apotheken*. Munich: Prestel Verlag; 1961.
- Arnold-Forster K, Tallis N. *The bruising apothecary*. London: The Pharmaceutical Press; 1989.
- Macdonald G. *In pursuit of excellence: one hundred years Wellcome, 1880–1980*. London: The Wellcome Foundation Ltd; 1980.
- Everitt G. *Doctors and Doctors*. London: Swan, Sonnenschein, Lowrey & Co; 1888.
- Pomet P. *A compleat history of druggs (Vol. 2)*. London: Bonwicke, Freeman, Goodwin et al; 1712.
- Haggard HW. *Devils, drugs and doctors*. Wakefield: EP Publishing Ltd; 1975.
- Packard FR. *Guy Patin and the medical profession in Paris in the XVIIth Century*. New York: A M Kelly; 1970.
- Balaban C, Erlen J, Siderits R (editors). *The skilful physician*. Amsterdam: Harwood Academic Publishers; 1997.
- Salmon W. *Pharmacopoeia Londinensis or the New London Dispensatory*. London: Thomas Dawks; 1678.
- Culpeper N. *Pharmacopoeia Londinensis or the London Dispensatory*. London: A and J Churchill; 1695.
- Quincy J. *Pharmacopoeia officinalis and extemporanea: or, a compleat English dispensatory (12th ed)*. London: T. Longman; 1749.
- Gray SF. *A treatise on pharmacology*. London: Longman, Rees, Orme et al; 1836.

Footnotes

1. Johnston was a physician practicing medicine in Leiden. The Dutch edition of his book, published in 1660, had one more plate (illustrating a sea unicorn) than the Latin one.