

HYPERICUM PERFORATUM THE FUGADEMON

Dr. E. Riva

The fear of death has always led people to seek out supernatural remedies and to consider disease as some outside agent that takes possession of the body. Often these events were seen as the result of spells, attributed to occult forces of evil, fuelling faith in the practice of witchcraft. Magic thus became an integral part of medicine and the most mixed and strange remedies were invoked including prayers and oration, spells, exorcism and talismans.

Drugs based on superstition date back to most ancient of times when the idea of a medical remedy had a supernatural aspect. Medicines and divine symbols were all intertwined with mythical characters where, for example, asclepiadea was Asclepio's herb, Achillea was Achille's herb, Centaurea was the centaur Chirone's herb and Peonia was the herb of the god Peone.

The merging of Hellenistic with

Christian thought also brought forms of symbolism that in the medical field led to a great quantity of, often illustrated books on herbs, stones and beasts that dealt with the supernatural virtues of animals, precious stones and herbs that had a more moral than scientific basis, taking the form of fables, legends, anecdote and fragments of astrology.

Even the Christian world thus became an inexhaustible source of elements for the divine warding off of evil spirits and prayers for health and recovery from diseases. With the appearance of faith in Christ and God, herbs that symbolised Christian figures were called into play, more often than not bearing holy names such as Christ's Palm, St. Mary's herb, St. John's Wort, the herb of the Trinity, holy wood and so forth, all reputed to heal diseases that were themselves pervaded with holy significance such as St. John's,

St Valentine's, St. Genesio's and St Vito's diseases as well as shingles that was known as St. Anthony's fire.

On the one hand the "doctors" moved in the direction of a systematic organisation of medicine, seeking to impose a rigorously experimental method to their work with recourse to drugs that acted "mechanically" on the body, i.e. as something material acting on another material thing.

On the other hand there was the widespread use of symbolic remedies to act "dynamically" on diseases originating in the spirit, i.e. with recourse to magic as a force acting against defeat and frustration.

Magic, astrology and cabalism and their mysterious and supernatural explanations thus found themselves at time working in parallel with strictly scientific thought, at the origin of scientific discovery. Both were directed toward the same end of

curing the sick by a suitable remedy.

There were no lack of attempts to provide "physiological" explanations of the effects of these supernatural cures and with these came into being the Paracelsian doctrine of the action of drugs based on their "signatures".

By this the virtue of any medication lay in its "arcanum", specific to each disease and whose properties derived from the stars. "*Stellae sut formae et matrices omnium herbarum et qualibet stella in coelo nihil aliud est quam spiritali et caotico mundo praefigurata herba qualem cumque etiam in terra representas*".

In this climate of mystery and obscure philosophical doctrine appeared the figure of the doctor-magician dealing with the possessed, the bewitched, the melancholic and the madmen whose humours were deranged by the black furies overtaking them. Thus it is we see the doctor-magician busy in his laboratory with filters and stills, seeking the magical powers to cure all ills. From among the endless number of potions and remedies that emerged, one was Hypericum or St. John's Wort. It was a plant used in those times as a charm to ward off evil spirits. It was hung from the

doors of houses or at bed heads to bring peaceful sleep. If it was collected under the constellation of Gemini, and particularly during the night of St. John, it served as a remedy for mania and rabies. These special properties of St. John's Wort earned it the reputation of putting demons to flight and it was also used as a medicine. Many medieval herbaria represented the plant growing towards the stars with a devil at its side, evidently about to flee. Paracelsus, the father of chemical pharmacology, considered the plant in the sixteenth century as an example supporting his astrological and cabalistic theories based on the principle of the "signature", whereby the form and the anatomy of a plant should suggest the organic disease for which it could be used as a treatment. "*Perforazionem eam et porositatem foliorum* - suggests Paracelsus - *indicare quod herba ea ad perforationis cutis tam internas quam externas auxilio fit velut ...*". Hypericum has opposed leathery leaves that are elliptical oblong shaped with the peculiar characteristic of having many translucent points along the whole length of its lower side. It was this that gave rise to its name of *perforatum*

and to the belief that it could heal skin lesions.

Certainly the plant has always been used as a popular remedy for wounds and for the healing of sores, a use that may be supported by modern science. *Hypericin* (a dianthraquinone), the *tannins* and some *terpenes* from the essential oil contained in the plant have been found to have a marked anti-inflammatory action on the mucosa that would justify the use made still today of preparations based on hypericin oil as a cicatrizing or healing agent for ulcers, infected sores and burns. Hypericum is popularly used as a balsam and in the treatment of catarrh and fever present in the bronchial tubes and lower urinary tract and also in this case the anthraquinones and tannoids have a confirmed antiseptic and anti-bacterial action. Studies and trials have also shown hypericin to have an effect on blood vessels and the heart. If injected into laboratory animals it is found to produce immediate vasodilatation with a consequent lowering of blood pressure accompanied by a negative inotropic effect on the heart muscle.

On this basis the conclusion was reached that hypericin is able to effect a marked parasympathe-

tic mimetic function though it seems this indication for the plant has not been followed through.

As for the claim that St. John's Wort "wards off demons" as demonstrated by its widespread and sinister medieval name of *fugademon*, it should be noted that the Parisian *Maitre apothicaire* François Geoffroi of the eighteenth century declared that the attempt to explode this myth opened the way to new and interesting studies on the components of the plant. "It is not that the demons were put to flight or seen to flee at the sight of the plant, - sustained Geoffroi - but rather the effect St. John's Wort has on hypochondriacs in causing them to become maniacal to the point they appear possessed by demons". In effect the plant was rediscovered in recent times as an effective remedy against endogenous and psychogenic depression by virtue of stimulant effect from the presence of *hypericin* both in the flowers and the leaves.

Hypericin is a dianthraquinone that seems to possess a stimulating action on the spine and act as a bio-catalyst able to effect changes in certain complex nervous disturbances as a result of

its action on the mono-amine oxidase inhibitor responsible for the breakdown of catecholamine and serotonin.

This therefore has an antidepressant action that seems to have produced interesting clinical results following comparative administration of total and standardised extracts of fresh *Hypericum* tops. This means that the plant acts with a synergic effect of all the active principles it contains, i.e. flavonoids, tannins, hyperoxides and essential oil. It is known that depression is the sum of a series of negative phenomena affecting the mind that, if left untreated, can develop into serious pathological syndromes capable of affecting mood, thought processes, vegetative functions and behaviour. The incidence of depression appears to be steadily increasing and recent estimates calculate that at 15% of the population in Europe will be, to a greater or lesser extent, affected in the course of their lives. It is therefore clear that the illness is today a matter of primary medical and practical significance as a social phenomenon of considerable importance and for which both psychological and pharmacological action is requi-

red and, where necessary, also by recourse to the use of herbal remedies.

A systematic study carried out in Germany on 3,250 patients treated at 663 medical centres seems to have produced encouraging results as regards the treatment of depressive syndromes.

Clinical trials have shown substantial equivalence between preparations based on St. John's Wort and the most commonly used anti-depressant drugs, and this without their sleep disrupting effects and a notable reduction in side effects.

One side effect that has been of much concern to toxicology has been that of the "photosensitization" probably induced by hypericin that could, in the long term, cause dermatitis particularly in fair-skinned individuals or "class 1 phototypes".

Such effects would seem however only to occur at such high doses and over such a long period that it is probably not worth its being taken into consideration.

In any case any total *Hypericum* extract preparations for oral consumption always bear the wording "avoid direct exposure to sunlight or the use of sun tan lamps".