## Ayurveda and Epilepsy

B.S. VENKATARAM, G. RANGAN, J. DAVID, K.S. MANI, K. NAGARAJAN, V.S. SRIDHARAN, D.K. SUBBAKRISHNA EPILEPSY STUDY GROUP, BANGALORE, INDIA

Ayurveda means 'the science or wisdom of life'; the word veda alone means 'treasure of knowledge'. This ancient medical discipline dates back to the vedic period, up to 1000 before Christ (BC). It can be defined as the branch of learning wherein the good and bad, or positive and negative, aspects of life conducive to a happy state are dealt with. Ayurveda is based on its own physiological principles and astute clinical observations. Like other

Indian disciplines the teaching and learning of ayurveda was from the preceptor to the pupil by word of mouth, the only medium of learning for that time. Charaka, an ayurvedic physician and Sushruta, an ayurvedic surgeon were renowned in the fifth century BC. With the advent of the art of writing, ayurvedic treatises were written first on palm leaves and subsequently on paper with indelible inks until printing was developed.

Ayurveda is a multidimensional health-care system dealing with physiological, pathological, psychosocial, spiritual, and environmental aspects of human well being. Preservation and promotion of health as well as prevention and perceived cure diseases are the two purposes of ayurveda.

The three basic principles of ayurvedic physiology are the Tridoshas (Tri - three; doshas - biological principles) broadly speaking responsible for all movement (vata), all metabolis (pitta), and all structure and lubrication in the body (kapha). These have balanced and overlapping functions on variou aspects of human physiology ar psychology including cognitive functions and psychosocial

s).

.1

n.

of

7 1

r.re.

; .nol,

, irt

It may be mentioned that many of these drugs are also used in several other diseases, almost always as polytherapy.

The dosages of ayurvedic AEDs are not fixed, and are gradually increased until mild side-effects, especially vomiting, is induced. From continued clinical observations over centuries, especially by families featuring traditional ayurvedic physicians, dosages of these have been so titrated that severe toxic effects are practically unknown. The drugs used now are probably the byproducts of such astute clinical observations in a patient population with limited mobility in and around their villages or towns and hence available for follow up. As a consequence, potentially toxic/teratogenic compounds might have been discarded from the therapeutic armamentarium. Unfortunately, in the absence of written material a considerable amount of knowledge has been lost.

In modern times even rural patients suffering from epilepsy generally approach an ayurvedic physician only when allopathic drugs fail or do not give the expected results. Very many ayurvedic practitioners

use their own system of drugs as add on therapy to allopathic drugs. In an unpublished study from Calcutta 'ayush 56' a herbal preparation from Marselia minuta and jatamamsi (Nordostachys jatamamsi) was found to be effective in a series of 273 cases of epilepsy over a period of three years. However, this could not be confirmed by one of us in a smaller study in Bangalore of 12 patients with intractable epilepsy. In the absence of further details. comments must be reserved. Another popular ayurvedic drug, particularly in and around Mysore is tantupashana. This is a herbomineral compound (tablet) containing asbestos as one of the ingredients. This has been tried as add-on therapy in uncontrolled cases of epilepsy. In earlier trials carried out between 1962-1977, overall beneficial results were reported. However, most of these studies are anecdotal and lack statistical validation. The controlled clinical trials that are a requirement of today's medical science are lacking in ayurveda. Whatever claims have been made are from purely observational methods and are

without adequate controls; but

while this may be a valid observational science shot scoffed at and ignored. Th be little nuggets of helpful information that can be ide through clinical trials. It is interesting that one of found an ayurvedic drug ja very promising in the labo against maximal electroshe seizure models in mice. Ac was elicited only when the crude extract was used, and fractionated components, v showed less activity at equ dosages. Maybe there are a or even synergistic actions compound preparation is u Failure to isolate the active principle involved in the ef of these "AEDs" need not necessarily refute findings on observational science ev over several centuries. An i open approach is the bench the scientific temperament to tap potential benefits, if Today's empiricism if systematically investigated become scientifically accep facts of tomorrow - as happ with einchona, salicylic aci

digitalis and curare.