### AGNIHOTRA IN THE TREATMENT OF ALCOHOLISM

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#### SUMMARY

Agnihotra is a Vedic ritual of litting fire in a copper pyramid pot with use of Mantras at sunrise and sunset time. It is found to have neurophysiological effect on human body and brain. Clinically it produces mental tranquility and reported to have useful adjunct effect on deaddiction. In our present study effect of Agnihotra was studied on 18 cases of alcoholism. It is found that it leads to total abstinence without other restrain after 2 weeks of continuous Agnihotra practice. An obsessive compliance to perform Agnihotra develops. After discontinuing, its effect last for another few weeks. Though relapse may develop on discontinuing Agnihotra, a sizeable number of cases i.e. 55%, continued to remain abstinent for more than 8 weeks. Agnihotra is not a total cure for alcoholism, but it may serve as an useful adjunct.

Inspite of various advances in psychopharmacology, behavioural sciences and psychotherapeutics; treatment of alcohol dependence remains unsatisfactory (Merris et al., 1974). It is easy to detoxify than to de-addict (Mohan, 1987). The participants at the national workshop for envolving strategies for de-addiction (1987) unanimously recommended studies and research on some oriental and indigenous methods like Yogas and Agnihotra which may have some promise in this field. Encouraged with the results of Agnihotra in recovery of a resistant demotivated smack addict (Golechha et al., 1987) we used this Vedic ritual for the treatment of alcoholism. The paper presents the result of our study and discusses the probable mechanism involved in its positive offect.

#### Material and method

The study was conducted in two places. Army Hospital Delhi Cantt (Group A) from Feb 87 to Dec 87 and Military Hospital Kirkee (Group B) from Mar 88 to Sep 88. A total of 18 cases of alcohol dependence who satisfied the criteria laid down by DSM III were taken up. Ten cases belonged to Group A and eight belonged to Group B.

After 7 days of abstinence in close psychiatric ward, when physical withdrawal symptoms were controlled/abated, they were exposed to practice of Agnihotra as on-looker, for 3 days. And later on voluntarily, after they had given expressed consent in writing, they were permitted to join the group performing Agnihotra. In the first 2 weeks supportive anxiolytic drugs were continued but tapered off there after. Agnihotra was performed regularly twice a day for continuously 6 weeks strictly as per the method described by Parakhe (1982) and Mulay (1986). The assessment of urge and motivation for abstinence was recorded utilising subjective as well objective scoring (Golechha et al., 1987). The clinical assessment was conducted at the end of 4 weeks and 6 weeks by

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permitting liberal out passes. Follow up was done for further 8 weeks.

## Observation and results

All the 18 patients were male, 13 were married, 4 single and one divorcee. Their age ranged from 24 to 54 years with mean age being 35.5 yr. They took 4 to 25 oz of liquor a day with average intake of 10.4 oz a day. Mostly it was rum and country liquor. Duration of alcohol intake varied from 2 to 13 years. Mean duration being 4.27 years. It was found that isolation and loneliness accounted for excess indulgence in 5 cases, failure in love/marital discord and disharmony in 4 cases, problems arising out of chronic illness in family was present in other 4 cases and in remaining five, no definite cause could be found. They described it as out of habit and varied non specific domestic and economic problems.

Light patients were brought for treatment for the first time. The other ten patients had received indoor treatment in the past at different Psychiatric Centres for more than once. Three cases have recieved treatment four times, earlier it comprised of detoxication with forced psychotherapy, abstinence. aversion therapy and supportive measures including anxiolytic drugs. Period of abstineace after treatment in these ten cases varied from nil to 24 weeks. Average abstinence being four weeks.

Daily urge score of the cases under study was the maximum i.e. 6 in each cases before starting Agnihotra. This progressively declined after one week and was recorded zero by 5th week, while they were performing Agnihotra regularly. They were discharged from hospital at the end of six weeks Agnihotra practice. All of them willingly and voluntarily continued the Agnihotra for further 2 weeks, regularly, either at their homes

or came to join at the Psychiatric Centre. After 2 weeks there were dropouts and only 3 patients i. e. 16% continued Agnihotra beyond 8 weeks. This continued voluntary compliance for Agnihotra after discharge from hospital by 100% cases for 2 weeks was an interesting phenomenon. There was no recurrence of alcohol drinking or use of any other intoxicating substances during this period, even smoking and consumption of tobacco decreased. The reasons for this drop out, in performing Agnihotra were varied. However, desire to continue Agnihotra remained and shared equally by all.

Effect of Agnihotra on their alcohol habit was seen in progressive decrease in daily urge score by 4th week; and during 5th and 6th week, patients were observed to have no urge for alcohol. This was further substantiated from the fact that all the patients during 5th and 6th weeks were allowed to go on out pass without any restrictions. They returned back in time without taking alcohol which was easily available out side. Patients described their high motivation to further abstain and expressed lack of total urge for alcohol, even at the sight of it, in different works. Some felt as if a wall has been created between them and alcohol and they just did not feel any desire for it. Others said they felt nausea at the site and smell of alcohol, and developed a great hatred for it. It was surprising to find the voluntary compliance of an obsessive nature for AGNIHOTRA while they were in the hospital and 2 weeks after discharge. They were restless and felt missing something after first weeks practice when they could not perform Agnihotra on few occasions due to some reasons.

The follow up result, after 6 weeks Agnihotra, on discharge from Psychiatric

		lst Wk	2nd Wk	3rd Wk	4th Wk	5th Wk	6th Wk	7th Wk	8th Wk
ī	No of cases remained abstinant (N=18)	18	18	16	14	12	12	11	10
IJ	% of cases maintained abstinent (N=18)	100	100	88	77	66	66	61	55
III	Cases continued N	18	18	8	6	3	3	3	3
	Agnihotra % (N=18)	100	100	44	33	16	16	16	16

TABLE-I Recurrence in Alcohol intake on discharge from hospital\*

Centre is as tabulated in Table I.

Follow up results revealed that for the first two week 100% remained abstinent. By the end of 8th week, 55% still continued total abstinence whereas Agnihotra was continued at that time by only 16% cases This indicates the left over effect of Agnihotra in preventing recurrences. The group patients who had received multiple treatment in the past with mean abstinent for 4 weeks now had shown total abstinence even after stopping the Agnihotra for a varying period ranging for not less than 2 weeks to more than 8 weeks with average abstinance for 6 weeks. This indicates that there is positive gain with practice of Agnihotra in keeping away from alcohol.

## Discussion

Agnihotra is a ritual of litting five in a small rectangular copper pyramid pot, using dried cakes of cowdung and offering ghee and rice to the fire at the time of sunrise and sunset with whisper of two mantras (Bhartiya Satsang, 1985). Its orign is traced to Rigveda where positive gains of physical and mental health and energy are preached with regular practice of this ritual (Parakhe, 1982). It has no cultural or religious bias.

To counteract the environmental pollution and enhance the tranquility of one's mind, Agnihotra is practised by increasing number of people belonging to various religions and culture, both in East and West. Other than India, its popularity has achieved a new height during this decade in USA. West Germany, Switzerland, France, Spain, Holland, Austria, Italy, Chile many other countries. Mulay (1986) has described the effect of Agnihotra in curing drug addicts. We could find its positive effect on mental tranquility and in deaddiction (Golechha et al., 1987). Our claim is further substantiated by neurophysic logical studies on effects of Agnihotra by Selvamurthy (1987). He in his studies, on healthy volunteers, reported the physiological effects of Agnihotra using various parameters viz the body arousal. physical state of relaxation, mental state of relaxation and monitored heart rate, blood-pressure, body temperature. skin temperature, galvanic skin resistance. and computerised EEG recording. In

<sup>\*</sup>After six weeks of regular Agnihotra practice.

computerised EEG, he found suppression of delta wave and enhancement of alpha wave in frontal leads showing state of mental tranquillity. This was found during and immediately following Agnihotra as compared to controls.

Our study shows clinically subjective and objective effect of enhanced tranquillity in those who had performed Agnihotra. The effect of Agnihotra in producing this tranquillity is of the magnitude that it could curb the urge for alcohol. Another finding worth noting is that this effect lasted for a minimum of 2 weeks in all subjects and tampered off gradually there after, on discontinuing of Agnihotra. It is difficult to explain the biophysical machanism involved in producing this effect. With the experimental finding of its neurophysiological effect as reported by Selvamurthy (1987), it appears that there is generation of some electromagnetic energy in and around Agnihotra pot, which has radio effect on biological systems of body and brain and their rhythms. The frequency and amplitude of the electromagnetic waves which are so produced are not yet known. Its synchronisation with cosmic electromagnetic field/milieu, existing at the time of sunrise and sunset may have amplifying and boosting effect. This may have stimulating effect on modification and enhancement in activity of some of the neurotransmitters and neuromodulaters related to natural tranquility effect, which results in enhanced tranquility state of mind and may be responsible for curbing the urge in our patients for alcohol. Further multidisciplinary research is required to know more about this oriental vedic practice and its effect on psyche of a man, which may bring about new hopes of tranquility without tranquilisers.

As the Agnihotra is an inexpensive and socio-culturally acceptable activity, we recommend it as an useful adjunct, in deaddiction, programme for alcoholics.

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