

LETTER TO THE EDITOR

SIDE EFFECTS OF A TRADITIONAL INDIGENOUS DRUG - KUTAJA  
( *HOLARRHENA ANTIDYSENTERICA* )

Sir,

( Received on September 14, 1981 )

Singh *et al.*, (5) conducted a clinical trial on a traditional antidiarrhoeal drug (4)-Kutaja (*Holarrhena antidysenterica* - Apocynaceae), to assess its effects in intestinal amoebiasis and giardiasis. It is usually believed that Ayurvedic drugs are harmless. However, indigenous drugs like Bhallataka (*Semicarpus annacardium*), Aconite (*Aconitum ferox*), Sarpagandha (*Rauwolfia serpentina*) do produce side effects. We report our findings on side effects of Kutaja in man.

The bark powder of Kutaja was given to 11 in-door patients in daily dose of 4.0 g (in three divided doses) for 15 days. Only in one case daily dose was 6.0 g. Assessment of subjective and objective findings was made regularly.

Three patients of our series complained of distinct drug-induced symptoms; the fourth had the symptoms as well as hypotension. First case, on the second day of treatment, complained of "sensation of heat" in abdomen and head, nausea, flatulence, constipation, agitation, nervousness and insomnia. He refused to take the drug further. Another patient complained of vertigo, syncope, weakness, and emptiness and "sensation of heat" in head. The third case complained of dryness of mouth, lightness of body, vertigo and burning in head and feet.

An adult male patient of giardiasis and malabsorption who had normal blood pressure (B.P. 136/86 mm Hg) and pulse, haemoglobin 9.0 gm% and serum total protein 4.1 gm% was treated with Kutaja in daily dose of 6.0 g. On the second day of treatment, he complained of "sensation of heat" and emptiness in head, restlessness and syncope. He fell down in morning, B.P. was found to be 66/40 mm Hg and his pulse was feeble, and at 60/min. Kutaja was withdrawn and supportive treatment (Mephentine, dexamethasone, glucose-saline infusion etc.) was given. B.P. returned to normal on next day and was maintained thereafter. Kutaja was again given on 7th day in the same dose. B.P. came down to 84/54 mm Hg; the pulse was also feeble. Kutaja was discontinued. Supportive therapy raised his B.P. to normal within 12 hr.

An adult female patient suffering from amoebiasis and giardiasis had moderate built; B. P. was 124/86 mm Hg and pulse rate 74/min. She was treated with Kutaja (4.0 g daily). B.P. was lowered from the second day of treatment and the drop conti-

nued till 9th day, till it was 100/60 mm Hg. However, neither was Kutaja withdrawn nor was any supportive treatment given. Minor fluctuations in B.P. were noted till the end of therapy (15th day). Her B.P. gradually rose to 126/92 mm Hg within two days, and remained within normal range thereafter till the patient was discharged.

In this series 4 out of 12 patients have complained of side effects, the nature of which was variable, inclusive of burning sensation in head, abdomen and feet, dryness of mouth, nausea, flatulence and constipation. Other reported symptoms included agitation, nervousness, fatigue and insomnia. Two patients had vertigo. Syncope occurred in one patient, who developed acute hypotensive state while another patient developed progressive hypotension.

Conessine, an important alkaloid of Kutaja, has been reported to produce neuro-psychiatric manifestations like restlessness, tremors, vertigo and gastrointestinal upsets in doses more than 500 mg a day (3). A review by Cavier (1) refers to side-effects of conessine viz., vertigo, insomnia, agitation, delirium and psychotic manifestations, occurring in susceptible cases.

Persistent hypotensive effect of even small doses of total alkaloids of *H. anti-dysenterica*, without any change in frequency and intensity of heart beat following an iv administration, is reported in the cat (2). We have observed clinically the acute hypotensive effect of Kutaja bark in this series on 6.0 g daily dose. A gradual decline in B.P. was also observed in one case of this series. Details given above clearly show that the effects were drug-induced, since after withdrawal of Kutaja, B.P. returned to normal levels. The hypotensive effect of Kutaja could be dose-related though the individual susceptibility may also be a determining factor (6). The present results thus indicate that Kutaja is not thoroughly atoxic and may lead to subjective symptoms as well as to hypotension.

G. N. CHATURVEDI AND K. P. SINGH

*Department of Kayachikitsa,  
Institute of Medical Sciences,  
Banaras Hindu University, Varanasi - 221 005*

#### REFERENCES

1. Cavier, R. Acquisitions récentes on therapeutique antiambienna. *Med. Trop.*, **19** : 619, 1959.
2. Chopra, R.N., I.C. Chopra, K.L. Handa and L.D. Kapur. In : *Indigenous drugs of India*, 2nd ed., Calcutta, U.N. Dhar & Sons, p. 345, 1958.
3. Sastri, B.N. In : *The Wealth of India. Raw Materials*, Vol. V, New Delhi, C.S.I.R., p. 105, 1959.
4. Shastri, K.A. In : *Sushruta Samhita (Hindi commentary)*, 3rd ed., Varanasi, Chaukhamba Sanskrit Sansthan, 40-93, 1972.
5. Singh, K.P., J.P. Gupta and G.N. Chaturvedi. Some clinical studies on Kutaja (*Hclarrhena antidysenterica* Wall) in intestinal amoebiasis and giardiasis. *M.D. (Ay.) Thesis, B.H.U., Varanasi*, 1980.
6. Wilmot, A.J. In : *Clinical amoebiasis*, 1st ed. Oxford, Blackwell Scientific Publications, pp. 63-64, 1962.