

## Correspondence

### Accidental *Jatropha curcas* poisoning in children

Three boys, 14–15 years of age, presented with vomiting, abdominal pain and a burning sensation in the throat following consumption of *Jatropha* seeds. They had consumed the seeds out of curiosity while playing. In less than 10 minutes, all of them developed a burning sensation in the throat and in about 30 minutes they had severe vomiting and abdominal pain. One boy had diarrhoea too. The vital signs and hydration were normal. All of them had normal renal and liver function tests. They were given a gastric lavage and treated symptomatically with intravenous fluids. The recovery time was 6–8 hours and they were discharged after 24 hours.

In another instance, two young brothers presented with vomiting following the consumption of *Jatropha* seeds. Again, the seeds were consumed out of curiosity. Within 30 minutes, both of them had severe vomiting. The vital signs and hydration were normal. They were given gastric lavage and treated symptomatically with intravenous fluids. Both of them had normal renal functions. They recovered in 12 hours and were discharged after 36 hours.

*Jatropha curcas*, commonly known as *Ratanjyot* or *Jungli erandi*, is an evergreen plant found throughout India, Southeast Asia and Africa.<sup>1,2</sup> All parts of the *Jatropha* plant are poisonous (Fig. 1).<sup>1</sup> Phorbol esters, present in high concentration in the seed, are mainly responsible for *Jatropha* toxicity.<sup>2</sup> The clinical symptoms include vomiting, diarrhoea, abdominal pain and a burning sensation in the throat. Depression and circulatory collapse have also been reported, and are said to be common in children.<sup>1,3</sup> *Jatropha* poisoning in humans is due to accidental consumption of seeds as in our cases. The symptoms manifest between 30 minutes and 2 hours after consumption, with a recovery time of about 24 hours.<sup>3</sup> The toxic dose is not known.<sup>1</sup> No direct dose–response relationship has been established between the number of seeds ingested and severity of symptoms.<sup>3</sup> Shah *et al.* observed that ingestion of only one to two seeds can cause toxic symptoms for a short duration.<sup>2</sup> Levin *et al.* reported severe gastrointestinal symptoms lasting up to 72 hours.<sup>4</sup> No specific antidote has been identified. Chomchai *et al.* recommend gastric lavage when the ingestion is within 1 hour and activated charcoal for all cases where the ingestion is <4 hours because of its potential for systemic toxicity.<sup>3</sup>

In recent times, *Jatropha* is being promoted as a biodiesel fuel.<sup>1,2,5</sup>

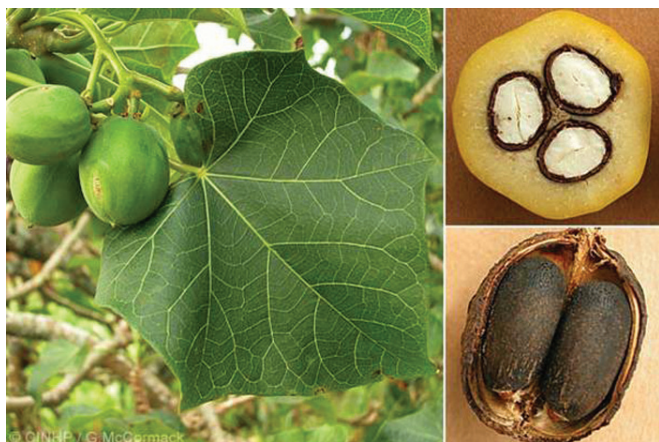


FIG. 1. *Jatropha curcas*—plant and seeds

A target area of 11.2–13.4 million hectares was to be planted with *Jatropha* by 2012 by the Government of India.<sup>5</sup> Hence, there is a likelihood of an increase in the incidence of *Jatropha* poisoning. In rural Thailand, *Jatropha curcas* is cultivated close to homes and schools. The yellow *Jatropha* fruit, which falls to the ground, can often be an object of curiosity, especially for school-going children.<sup>3</sup> Lall opined that children in schools should be educated regarding the consequences of consuming unfamiliar plant substances and household chemicals.<sup>6</sup> To conclude, accidental poisoning in children is a preventable public health problem and health education should be provided in schools.

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### Preserving the legacy: The history of Indian neurosciences

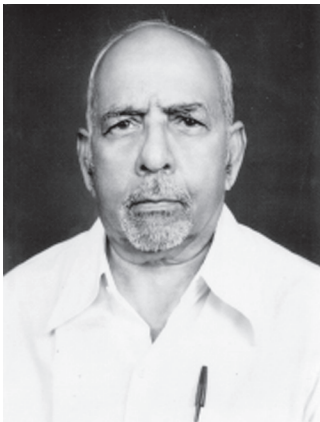
It is sad that many pioneers in the field of neurosciences in India are forgotten and hardly anything is written about them. I was preparing a publication for the Neurological Society of India (NSI)<sup>1</sup> and getting any information about some of them appeared an insurmountable task. One such stalwart was Dr S.T. Narasimhan, one of the four founders of the NSI.

Professor Jacob Chandy (1910–2007), Professor B. Ramamurthi (1922–2003), Professor Baldev Singh (1904–1998) and Dr S.T. Narasimhan started the NSI in 1951. Professor Ramamurthi's autobiography *Uphill all the way* provides some details about Drs S.T. Narasimhan and K. Mahadevan Pillai (1908–78; the first neuroradiologist in India).<sup>2</sup> Professor Jacob Chandy's autobiography is another good source of information about the initial development of neurosciences in India but does not have information about Dr S.T. Narasimhan.<sup>3</sup>

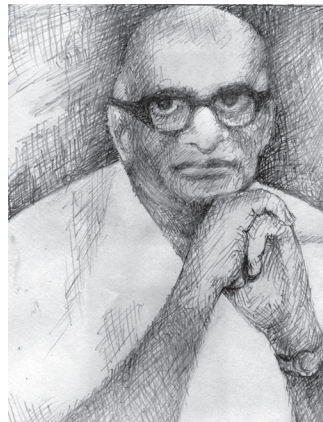
I could get some more information about Dr Mahadevan Pillai in

2001 and published it in another book.<sup>4</sup> The most reliable source of information on Dr S.T. Narasimhan is still Professor Ramamurthi's autobiography. However, I have gathered a few more anecdotes about Dr S.T. Narasimhan from varied sources. Using all the data I have, a thumbnail picture of Dr S.T. Narasimhan would be as follows: 'S.T. Narasimhan was a medical licentiate (LMP Licensed medical practitioner). Ramamurthi's first encounter with him was in 1945 when Narasimhan planned to go to the USA for higher studies in Orthopaedics after "selling his practice". Ramamurthi did not take up his offer but someone else did. Dr S.T. Narasimhan returned in 1948 (exact date unknown) after getting training in EEG, neurosurgery and neurology and set up a small private neurosurgical nursing home and EEG laboratory. He lived in a two-storeyed house in Kilpauk, Chennai.'

Jacob Chandy returned to India in January 1949 and started an academic department of neurosurgery in Christian Medical College, Vellore—the first of its kind in India. (To quote Chandy, 'I joined the institution in January 1949 and came to Vellore in April', p. 65, *Reminiscences and recollections*.) When Ramamurthi returned in 1950 (24 October 1950, p. 137, *Uphill all the way*) after his training in neurosurgery, he invited Dr S.T. Narasimhan to join him. (Dr Ramamurthi noted that Narasimhan was 37 years old at that time, which would mean that Narasimhan was born in 1913.)



Dr K. Mahadevan Pillai



Dr S.T. Narasimhan

Dr S.T. Narasimhan was an industrious person and hence he joined a short-term course for MBBS and gained a medical degree. He was of great help to Dr Ramamurthi both in patient care and also during neurosurgical procedures. He provided EEG service to Dr Ramamurthi's patients, and the Government of Madras would pay ₹30 for each procedure. With Dr Ramamurthi's support he was posted as Honorary Professor of Electroencephalography in 1959. But he died in the same year in Bangalore (exact date not available). There is some doubt about the cause of his death prematurely at the age of 46 years. If there are any other sources from which the available dates can be cross-checked, I would be grateful if this information could be provided to me.

So, I presume Dr S.T. Narasimhan's period would be 1913–59. Dr Ramamurthi has given a photograph of Dr S.T. Narasimhan and Dr K. Mahadevan Pillai together in his autobiography. Though I could get a good photograph of Dr Mahadevan Pillai (Fig. 1) in 2000 from his son, I have yet to get a photograph of Dr S.T. Narasimhan. A pencil sketch of Dr Narasimhan which is a fair replica of him (Fig. 2) has been done by a friend of mine.

I also have no information about Dr Grillmayr who was the fourth president of the NSI. All I know was that he practised in Ceylon (and probably in India) and he was the person who made the emblem of the NSI. I would appreciate if anyone can provide further details about these great people.

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