A Survey on Yellow Oleander Poisoning

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This survey was conducted among the female patients admitted with Yellow Oleander Poisoning in a hospital in Palakkad District (Kerala State) during the year 1995. A total of 161 female patients were admitted.

Objectives

To create an awareness about the plant and its potential toxicity among the general public.

To study the root cause of suicidal attempts.

To examine if there is a pattern in the suicidal attempts.

About the Plant

This Yellow Oleander Plant belongs to the Apocynaceae family and is restricted to some parts of the state. Its botanical name is Thevetia Cerbera. All parts of the plant are poisonous. The flowers are bell shaped and of yellow colour. The leaves are lanceolate. The fruit is light green and globular, about 4-5 cms in diameter and contains a single nut which is triangular with a deep groove. The seeds contain 3-4% of the cardiac glycoside, Thevetin, which is 1/8th as potent as Onabin and similar to Digitalis in action. Thevetocin is similar to but less toxic than Thevetin, Nerifolin (more potent than Thevetin) Peruvoside and Revoside, also a bitter principal that acts on the CNS and produces tetanoid convulsions. Milky juice is rendered from all parts of the plant.

Since the seed of the plant is available throughout and due to its easy availability, especially in Palakkad District, youngsters who act on the spur of the moment find this very suitable for a suicidal attempt.

Symptoms of Poisoning

The sap of the plant may cause inflammation in sensitive individuals. Chewing the seed kernel causes slight numbing sensation and a feeling of heat. Ingestion causes burning pain in the mouth, dryness of throat, tingling and numbness of tongue, vomiting, diarrhoea, headache, giddiness, dilated pupils, loss of muscular power and fainting. Pulse is rapid, weak and irregular. Blood pressure is low. Heart blocks and collapses and death from peripheral circulatory failure occurs.

Findings

The survival rate is 17/161. If the patient is brought in time and a stomach wash is given, chances of survival are almost 100%. Only those who are brought to hospital late succumb to the toxic effects. More than 50% of the fatal cases are in the age group of 16-20 though only 57/161 had made the attempts.

We may further regroup the cases as following with age group of 11-30 as Group A, roughly from puberty to ripe womanhood, and 31-50 as Group B, those who have crossed the prime womanhood to menopause, 51 and above as Group C, middle age to old age.

Here it can be noted that 126/161 of the attempts are in the age group of 11-30 (Group A) and the death rate in this is above 10%. For those in age group 31-50 (Group B) when the sexuality gets reduced, the attempts are 26/161 and the fatality is less than 10%. For those above 51 years (Group C), well passed their reproductive capacity, there were 9/161 attempts, the fatality rate being 0%. In other words, suicidal attempts and fatalities have a direct bearing upon the degree of sexual activity and the intense emotions caused by it.

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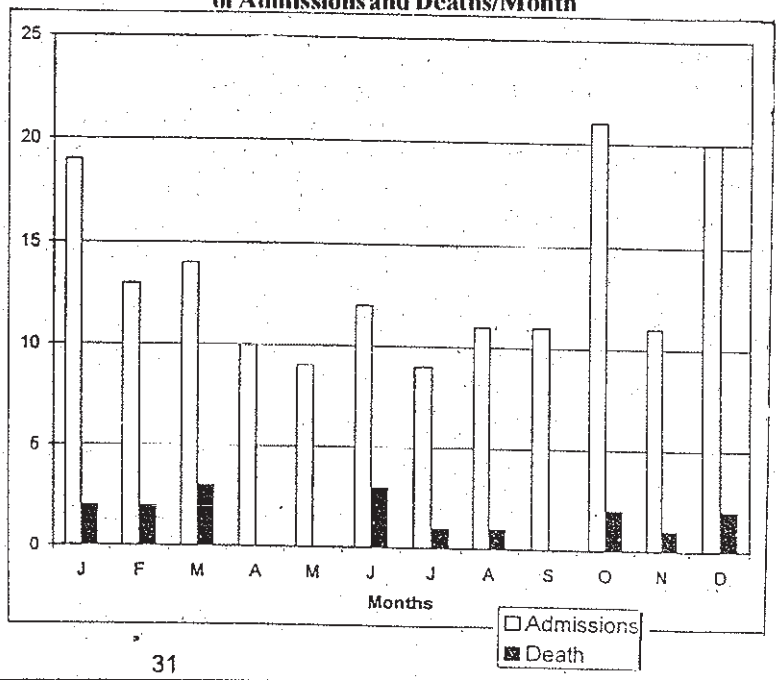
Multiple Bar Chart Showing the Number of Admissions and Deaths/Month



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Assistant Secretary's Tour of Karnataka

Tentative Tour Programme of Mrs. Sujana Chakravarty, Assistant Secretary, TNAI, of Nursing Institutions in Karnataka:

Feb. 19, Dep. 9:15 pm New Delhi (Karnataka Express); Feb .21, Arr. 2 pm Bangalore; Feb. 21, 22, 23, 24 (Stay at C.O.N., Bangalore), Feb. 22, 8-11 am (C.O.N., Fort), 12-3 pm (ESI Hosp., Indira Nagar), 4-7 pm (St. Martha's Hosp.); Feb. 23: 9 am-1 pm (Victoria Hosp., K.R. Mkt), 2.30-5.30 pm (Bowring & Lady Curzon Hosp.); Feb. 24: 9 am - 1 pm (Armed Forces Comm. Hosp.), 2.30-5 pm (ITI Hosp.), 6 pm-8.30 pm (St. John's Med. Coll. & Hosp.); Feb 25: Dep. Bangalore 8.00 am (Bus), Arr. Mandya 12.00 (Bus), 2 pm - 5 pm (Distt. Hosp., Mandya), 6.00 pm Dep. Mandya (Bus); 8 pm Arr. Mysore (Stay: Feb. 25-27, K.R. Hosp., Mysore); Feb. 26: 9 am-12 noon (K.R. Hosp, Mysore), 2 pm - 4 pm (Railway Hosp.), 6 pm - 8 pm (Holdsworth Mem. Hosp/ School of Nsg.); Feb. 27: 8 am - 11 am (Cheluvamba Hosp. and School of Nsg.), 12 noon - 3 pm (ESI Hosp.), 4 pm, Dep. Mysore (Bus), 6 pm, Arr. Kodagu (Distt. Hosp., Madi Kare (ANM Trg. Centre)(Night stay); Feb. 28: 9 am - 12 noon (Kare (ANM Trg. Centre), 2 pm - 4 pm (Gen. Hosp., Somwarpet), 5 pm: Dep. Kodagu (Bus); 8.30 pm, Arr. Hassan (District Hosp., Hassan); Mar. 1: 8 am - 12 noon (District Hosp., Hassan), 1 pm - 4 pm (CSI Hosp., CSI Redfern Memorial School of Nsg.), 4 pm, Dep. Hassan, 8 pm, Arr. Chickmagalur [Stay: Distt. Hospital (W & C)]; Mar. 2: 8 am - 12 noon (Distt. Hosp. (W & C)], 2 pm - 4 pm Chickmagalur (Distt. Hospital), 4 pm Dep. Chickmagalur (Bus), 8 pm, Arr. Dakshina Kannada (College of Nursing, Mahe, Manipal); Mar. 3: 8 am - 11 am (College of Nursing, Mahe, Manipal), 12 noon - 4 pm (Father Muller Hosp, Kankanady), 6 pm - 8 pm (CSI Hosp, Udipi); Mar. 4: 9 am - 12 noon (Wenlock Dist. Hosp., Mangalore), 7 pm, Arr. Shimoga (Bus) Distt. Hosp., ANM Trg. Centre); Mar 5, 9 am-12 noon Shimoga: Distt. Hosp, ANM Trg. Centre; Mar 5: 1 pm Dep. Shimoga (Bus); 6 pm: Arr: Uttar Kannada; 7-9 pm: Distt Hosp. Karwar, ANM Trg. Centre; Mar 6: 6 am, Dep. Uttar Kannada (Bus); 10.30 am: Arr. Dharwad; 11 am - 2 pm: Karnataka Med. Coll. Hosp. Hubli (SON); 3-5 pm: Railway Hosp; 6-8 pm: Mission Hosp, Gadag, ANM Trg. Centre; Mar 7, 6 am: Dep. Dharwad (Bus); 10 am: Arr. Belgaum: 11 am-2 pm: ANM Trg. Centre; 3-6 pm: KLE Society Hosp. & Res. Centre, SON, Nehru Nagar; Mar 8: 6 am Dep. Balgaum (Bus); 12 noon: Arr Bijapur; 2-5 pm: Distt Hosp, Bijapur; 5.30 pm: Dep. Bijapur; 10.30 pm: Arr. Gulbarga, Distt. Hosp., SON; Mar 9,: 9 am - 12 noon: Dist. Hosp., SON; 2 pm: Dep Gulbarga (Bus); 6 pm Arr. Bidar; 7-10 pm: Methodist Mission Hosp; Mar. 10: 9 am-12 noon: Distt. Hosp., Bidar; 1 pm: Dep. Bidar (Bus); 6 pm: Arr. Raichur; 7-10 pm Navodaya Vidya Samithe, SON; Mar 11: 6 am Dep. Raichur (Bus); 10.30 am: Arr. Bellary; 11 am - 2 pm: Med. Coll. Hosp.; 3-5 pm Distt. Hosp. (W & C); 6 pm: Dep. Bellary; 10.30 pm: Arr. Chitradurga (Chitra Durga Gen Hosp.); Mar 12: 8-11 am: Davangere, SON; 12 noon-2 pm Mother Theresa's SON; 2 pm: Dep. Chitradurga; 6 pm: Arr. Tumkur; 7-10 pm: SON Siddartha Edn. Society (Night Stay); Mar. 13: 6 am: Dep. Tumkur; 10.30 am: Arr. Kolar; 11 am - 2 pm: ETCM Hosp., SON, Kolar; 3-5 pm KGF Gen. Hosp., 6-8 pm Pavan SON, Bangalore-Madras byepass road, 8 pm Dep. Kolar, 11 pm: Arr. Bangalore (Stay: CON, Fort, Bangalore); Mar 14: 9-11 am: DHS Bangalore; 12 noon - 1 pm: Karnataka Regn. Council; 2-6 pm: Karnataka State Exe, Branch Pre-Conference (SNA) meeting with Secy-General; Mar 15: 5.05 pm: Dep. Bangalore (Bangalore-Kachiguda Express); Mar 16: 9.28 am: Arr. Kachiguda (Hyd); Mar 18: 7 am: Dep. Secunderabad (AP Express); Mar 19, 8.50 am: Arr. New Delhi (TNAI Hqrs).

Representatives from adjoining areas, institutions and Public Health Centres/Sub-Centres/Clinics may please join the meetings in the institutions convenient to them and inform the Principal Nursing Officer/ Nursing Superintendent/Matron/ Principal/Tutor in advance accordingly.

Concurrent Interest Section Meetings

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Sister Lilia, Principal, Lissie College of Nursing, Kochi, and President, Kerala State Branch, TNAI, gave a vivid picture of what is Nursing Research, what are the purposes of Nursing Research and the Contribution of Florence Nightingale to Nursing Research and the ways and means to implement small Nursing Research studies at the undergraduate level.

The topic was opened for discussion in which **Mrs. Kanta Sangar, Mrs. Pillai, Dr. Aleyamma Kurian** and other eminent personalities in the Nursing profession expressed their views and helped in formulation of the recommendations. These later were adopted in **Business Session-II** on September 27. They are given elsewhere.

A Survey on Yellow Oleander Poisoning

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Since the seed of the plant is available throughout and due to its easy availability, especially in Palakkad District, youngsters who act on the spur of the moment find this very suitable for a suicidal attempt and had there been more care and guidance from the elders, most of those attempts could have been aborted.

Suicidal attempters needing a lot of pre-planning seldom resort to this as a means. From this we can infer that almost all the attempts in all the age groups could have been decided on the spur of the moment depending upon the availability of the seed in proximity.

The 77 patients admitted between January and June included 74 Hindus, 2 Muslims and one Christian. In this 48 patients were married and 29 were unmarried. Most of them belong to a weak socio-economic background.

Conclusion

Though the chances of survival are very high, it could be advisable that the relatives be sympathetic to ease the tension which was the root cause for the attempt.

Admission Notice MAHE Manipal

The Admission Notice for Nursing Courses at Manipal Academy of Higher Education, Manipal, Karnataka was published on two different pages (p. 6 and p. 23) of NJI, January, 1998, due to some communication gap. Candidates applying for admission to this institution may follow the Admission Notice appearing on page 23 of the abovesaid issue of the Journal and ignore the one published on page 6. The inconvenience is regretted.

Editor, NJI