

A case Study - Evaluation of Antibiotic Activity of "Sphaeranthus Indicus" Specially on Skin Disease as a Folk Medicine

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Abstract -

"Sphaeranthus indicus Linn" is small herb widely distributed through India, Srilanka, China & Indonesia. The Plant is reported to possess anti-inflammatory, antibiotic, antihelmintic, antifungal, bronchodialatory, anti-epileptic activity. Decoction of the plant is used against bronchitis, asthma, scabies and skin disease. This paper deals to elaborate its therapeutic value as to cure skin disease.

Key Words - Antihelmintic, Anti fungal, Bronchodialatory.

Introduction -

"Sphaeranthus indicus Linn^{1,2}" belongs to family Asteracea, distributed all over India, Srilanka, Australia & Africa. It is a small herb with sessile leaves and round purple coloured flowers. It is also known as "Gorakmundi" in Hindi. Phytochemical studies revealed that it contains sesquiterpene lactones, 7-hydroxyeudesmanolides³ steroidal glycosides⁴ a flavanoid glycoside, 5 hydroxy, 7 methoxy-6-C glycosyl flavone⁵. The plant is reported to have cherry coloured essential oil containing α & β ionone, eugenol, citral, geraniol α - terpenene⁶, along with alkaloid sphaeranthine⁷. Its wound healing property was also established in guinea pigs using cream containing ethanolic extract once a day for 15 days that showed the recovery of wound significantly comparable to neomycin.^{8,9} Because of its reputed therapeutic values, author has tried to elaborate its effective efficacy to cure skin disease, exclusively boils and pimples indigenously.

Material & Method - A case study was carried out to evaluate its antibiotic property using this herb indigenously to cure skin disease like boils and pimples often caused by staphylococcus bacteria and fungal infection. Entire treatment process was carried out under the observation and monitoring of local herbal medicine expert in the village.

A young boy who every year got infected in rainy season and suffered from boils and pimples was chosen for evaluation. "Sphaeranthus indicus" plant with flowers was collected locally and dried. Decoction of the dried plant in water was prepared by heating it up to one fourth volume. That was decanted and filtered by muslin cloth. Half glass of this decoction was given regularly to the sufferer once a day for fifteen days, as

usual always given by local Ayurvedic physician to such infection cases. Regular monitoring was done for any side effect.

Result - After giving the decoction of plant "Sphaeranthus indicus" for 15 days surprisingly we found that condition of patient was quite improved. All the boils and pimples on the body especially on the legs were disappeared. It is also quite remarkable that this young boy never got infected by above disease further. This shows that how this local herb works to cure skin disease by virtue of its antibiotic activity.

Conclusion - India is bestowed by rich flora and fauna. Nature has provided us variety of precious herbs to cure various ailments indigenously. Some of those give us relief in a surprising manner without casting any harmful effects at a minimum cost. Still there is a need to investigate various aspects of herbal drugs alongwith their application at the larger scale.

References -

1. Kirtikar, K.R. Basu, B.D. "Indian medicinal plants" Vol.-2 P, 1347 (1935).
2. Chatterjee, A, Pakrashi SC, 1st ed. Vol. 5, New Delhi, National Institute of SC communication and information resources 2003.
3. Rojatkar, S.R., Nagasampagi BA - 7 hydroxyeudesmanolides from sph. indicus. phytochem 1992, 31,3270-1
4. Singh, S.K., Tripathi, V.J., Singh, R.H. B-D glucoside of (245) - ethylcholesta, 4, 22 dien, -3-B-01 from Sp. indicus. Indian drugs, 1989, 26, 317-18.
5. Mishra BB, Yadav SB, Singh RK, Tripathi V. Novel flavonoid C-glycoside from sph. Indicus 2007, 12, 2288 - 91.
6. Baslas, KK, Essential oil from sph indicus perf. Essent oil Rec. 1959, 50, 765-8,
7. Basu M.K., Lamsal PP, A chemical investigation of sph. indicus. J. Am. Pharm. Asso. sci. Ed. 1946, 35, 274-75.
8. Sadaf, F, Saleem, R, Ahmad M, Ahmad, SI, Navaid-ul-Zafar. Healing potential of cream containing extract of sph. indicus on dermal wounds in guinea pigs. J. Ethnopharmacol. 2006, 107, 161-63.
9. Jha RK, Garud N, Nema RK, Excision and incision wound healing activity of flower head alcoholic extract of sph. indicus in albino rats. Global J. Pharmacol, 2009, 3, 32-37.