PHARMACOLOGY OF GUGGULU WITH SPECIAL REFERENCE TO CONCEPTUAL PHARMACOGNOSY IN VEDAS

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Received on: 06/01/13 Revised on: 10/02/13 Accepted on: 12/03/13

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E-mail: vdgmanda@gmail.com
DOI: 10.7897/2277-4343.04329
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ABSTRACT
Guggulu a very known and common name in the field of Ayurvedic practices which is used as an important medicine for treating a lot of diseases. The drug having a lot of potency described in Ayurveda with pharmacological action tested with its present Research and Development study. It should be wiser to establish a platform for the next generation to understand the modules of Guggulu preparations and administrations. Though guggulu is an established drug but the phytochemical and Pharmacological R and D study have found the merits and demerits of the guggulsterone, the active principle of the drug Guggulu. However, the relationship between the effect of Guggulu both in Ayurveda and modern science has been found similar. Efforts have been made in this paper to study the relationship of Guggulu starting from Veda to present Lab. facts.
Keywords: Guggulu, Pharmacognosy, Ayurveda

INTRODUCTION
Existence of Ayurved is believed to be pre-historic due to fundamental concept of Panch Mahabhut. No doubt the system of knowledge based on the natural sciences continues with unaccountable truth and evidence. Ayurveda is the extended version of Atharv veda for which it is being named as “Atharvanii” and starting from Trisutra (Hetu Linga Ausadha) expanded to the whole nature and it’s products. Ayurveda has identified and incorporated all the naturals as medicine having their eternal potency due to value added properties like Haritaki, Bibhitaki, Amalaki, Guduchi etc. Guggulu is one such natural drug which is even considered as Divya Ausadhi by rishis/ancestors.

History
Guggulu is one of the ancient Ayurvedic drug described in Atharvaveda (2000 B.C.). Guggulu possesses the specific qualities as described in Atharvaveda.

“aa natam yaksma arundhatre nainam sapatho asnute yam bhesajashya gugguloh surabhirgandho asnute viswen cha tasmad yaksma mruga asvoive rante yad guggulu saindhavam yad yasansy samudryam ubhaygoragrabham namasna aristatataye”

(Atharveda:Khand:29:Su- 38)

The above version indicates that Guggulu is the best medicine, it has an aromatic order. It removes the diseases because it develops through the rays of hot sun on specific circumstances. Further it denotes-

“marubhumishu jayante prayashah purapadapat bhanourmayukheh santaptah grishme munchati guggulu”

It means guggulu automatically exudates from the free when exposed to sun specifically in desert areas. It is indicated in Yaksha which is the synonym of the term disease as –

“rogapapma jwarovyadhi vikaro dukhamamaya yaksmatankam gadavidah sabdah paryayavachinah”

(Amarkosh)

The disease can not appear in sunlight. So it removes the disease like a deer that runs away on seeing the horse. It appears from the above citation that Guggulu is a potent drug for eliminating all sorts of diseases.

Medicinal potency in classic
From the above reference it appears that guggulu was considered as an important drug during Vedic period. Apart from this, they have also specified that guggulu mixed with salt removes all the diseases along with complications. It is a fact that veda describes the inner quality for managing all sorts of diseases where in the later period the seers of Ayurveda have developed some specifications of the diseases with their varieties. Maharishi Charak has specified more accurately as

“guggulurmedonilaharanam” (Ch.Su.25)

The citation defines that all sorts of meda (lipid) and Anila (Vata or neurological) disorders are managed, specifically Pravrudha Meda (lipid disorder) and Pravrudha vata (neurological disorder) are cured by guggulu only. However, a lot of descriptions not only in vihhatrayi rather contemporary and in later works have described the unlimited potency of Guggulu. If we analyse, we find a lot of diseases described in Ayurveda are managed properly by Guggulu. According to Susruta Sandhita, Guggulu cures obesity, liver dysfunctions, internal tumors, malignant sores, ulcers, urinary complaints’
fistula-in-ano, intestinal worms, leucoderma, sinus, oedema and paralytic disorders. It is also considered as cardiac tonic (Hrudya). But, all these diseases are not cured only by guggulu itself rather combination of other drugs are added to potentiate against a group of diseases and accordingly a variety of Guggulu preparations came out in later period as- Yograj Guggulu, Maha Yograj Guggulu, Kaisore Guggulu, Kanchnar Guggulu, Vatari Guggulu, Suthi Guggulu, Amruta Guggulu, Lakyadi Guggulu, Katuki Guggulu, Pushkar Guggulu, Trifala Guggulu, Trayodasanga Guggulu, Saptavini Guggulu, Panchtikta Ghrir Guggulu, Navak Guggulu and Medohar Guggulu etc.

**Identity and Modern pharmacological evidence**

As on today, the modern science has also confirmed the modern pharmacognosy is concern not been evaluated in a clinical setting but it appears to be diseases stress Anti pharmacognosy is concern not been evaluated in a clinical setting but it appears to be diseases stress Anti ocardio as anti involved in the regulation of bile from guggulu and evaluated for their pharmacological Besides sterols with a high degree of human bioactivity which is found extensively in the dry regions of the Indian sub-continent mainly India, Pakistan and Bangladesh. It is a shrub with thorny branches.

Use of the guggulu preparations have been experimented as antiinflammatory Hypolipiduicern, Hepatoprotective, cardio-protective, Antioxidant, anticancer, Anti osteoclastogenic, thyroid stimulatory, Antiarthritic, Antioestoropotic, Antielminthic, Anti-acne, and Antiobesity like properties. It is also used in oxidative stress- myocardial ischemia and neurodegenerative diseases and as a potential antiedementia drug and cognitive enhancer.

**Pharmacovigilance and Toxicity**

The bioavailability, pharmacokinetic and pharmacodynamic effect of Guggulu in human are not up to content by modern method of research till today but it appears that Guggulu can affect the bio availability of other drugs. The safety and long term use of guggulu has not been evaluated in a clinical setting but it appears to be devoid of acute, sub acute or chronic toxicity as studied on rats, dogs and monkeys. So far Ayurvedic pharmacognosy is concerned it is mentioned that-

"Sa navo vrumhano vrushyam puranaswati lekanah"

That if old guggulu is used for a prolonged period it may cause lypolysis action resulting to emaciation and the fresh Guggulu has lipogenetic action. Further reference says-

"timira vadana sosha klivata karsyamohan,
Samala sithila bhavam deha raukhyaam cha,
Tasmat rajanichar nishevi syat na rogeshu amishu"

(ASU 49/178)

Means it can cause loss of facial glossy, impotency, wasting condition, vertigo/dizziness, dryness of skin etc. if continued for a prolonged period.

So far modern parameter and Ayurvedic references are concerned Guggulu or guggulu-sterone is generally safe in short-term use although side effects such as skin-rashes, diarrhoea and nausea have been reported. No significant side effects have been observed on renal function, liver functions, haematological parameters, or electrolytes as evident from records. Guggulu has a long history of safe use in Ayurvedic system of medicine however; it should be used cautiously in combination with other drugs, as it may modulate the activity of drug metabolizing enzymes.

**CONCLUSION**

Every drug has got it’s own mode of action through inherited potency generated from nature and it is also very difficult to establish by limited parameters. Ayurveda believes in Rasa, Guna, Veerya, Vipaka and Prabhava which were known to the ancestors of Ayurveda and accordingly they have brought out a lot of guggulu preparations for variety of diseases. Time has come to revalidate those evidence based formulae to restore the healthy conditions of human being. It is natural and we should get closer to nature to understand.

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Cite this article as:


Source of support: Nil, Conflict of interest: None Declared