

THE CLINICAL IMPORTANCE OF CHLOROPHYTUM BORIVILIANUM(WHITE MUSLI) IN OLIGOSPERMIA

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ABSTRACT

White Musli is a aphrodisiac drug . It have an natural biological environmental effect on neuro hormonal sexual axis. It maintains the equilibrium in mind and body. It reduces the sexual harassments like libido, impotency, infertility, and oligospermia. It increases sexual disireness , reduces fatigueness, maintains sexual satisfaction level, reduces the early ejaculation, increases sperm maturity, increases sperm number, increases sperm activity, reduces the oligospermia and infertility. It maintains the mental and physical equilibrium by homeostasis of blood include the regulation of temperature and the balance between acidity and alkalinity i.e ph balance of the body.

Key Words: Aphrodisiac plants , herbal aphrodisiacs, libido, erectile dysfunction, impotency, oligospermia, infertility.

INTRODUCTION

Mental stress, work stress , lack of physical exercise, constant sitting habbit, lifestyle changes like late night food and sleep, sleep under sunlight i.e daytime sleep increases libido, oligospermia, infertility, impotency. Loss of libido, irrectile dysfunction, oligospermia, infertility, impotency is a major clinical condition for male. Psychosexual development in hormonal axis i.e, pitutary-gonadial axis is most important for development of healthy progeny. There are so many natural aphrodisiac substances available in classical texts and traditional practices induces sexual desire ,pleasure and reduces oligospermic

activity. Yohimbine and the mandrake plant in Africa and Europe, Spanish fly and Ground Rhinoceros horn in the Chinese culture.

In recent study conducted in Gopabandhu ayurveda Mahavidyalaya, Puri, India, men between the ages of 40 and 70 reported some degree of sexual dysfunction, oligospermia, and infertility. Aphrodisiacs on the basis of mode of action classified into three types that increase sexual appetite; libido, increase sexual power; potency, and sexual pleasure. There are so many folkloric medicines of plant origin used for erectile dysfunction, infertility, oligospermia, physical performance in men, among them very few have been scientifically identified. Ambrein of *Ambra grisea* plant used for increasing libido in Arab countries. contains tricyclic triterpene alcohol acts on anterior pituitary; releases several hormones and testosterone. In China *Panax ginseng* acts as an antioxidant; enhances nitric acid synthesis in endothelium of corpora cavernosa; ginsenosides help in transmembrane nerve stimulation activated relaxation associated with increased tissue cyclic guanosine monophosphate.

INFERTILITY AND OLIGOSPERMIA

Infertility means the failure of to become pregnancy after one year of regular, unprotected intercourse of a couple.[1,2] One third of infertility is due to female infertility, another third are due to male infertility, and remains due to both partners or due to unknown cause.[3] More than 90% of male infertility patients are due to low sperm counts; Oligospermia, or poor sperm quality, i.e. poor sperm motility, abnormal sperm shape or both.

Seminiferous tubules in testicles produce sperm. Sperm head contains DNA, when it combines with ovum DNA, fertilization occurs to produce new offspring. Acrosome, the sperm head penetrates the ovum. Middle portion of the sperm contains mitochondria, supply energy to tail for movement. And the sperm moves like whip-like movement towards ovum inside the uterus and fallopian tube for fertilization.

3, Spermatogenesis or the production of sperm regulated by complex system of organs and hormones. The initiation of process starts in the area of brain called the hypothalamus-pituitary axis, the chemical messengers neurotransmitters, hormones and system of glands maintain an integrity for reproduction. GnRH in hypothalamus prompts pituitary gland for secretion of follicle stimulating hormone (FSH) and luteinizing hormone (LH)[4]. FSH helps in sperm production, and LH stimulates to produce testosterone. Testosterone and sperm

production occurs in testicles or testes in the scrotal sac, present outside the body as the internal body temperature is too high to allow sperm production. In this process the seminiferous tubules stimulated through FSH, produces the sperm and Leydig cells produce the testosterone through luteinizing hormone.

Oligospermia is considered when the sperm count is less than 20 million/ml.

HERBAL APHRODISIACS

The medicines for libido, impotency, infertility, oligospermia, which increases sexual disireness, reduces fatigueness, maintains sexual satisfaction level, reduces the early ejaculation, increases sperm maturity, increases sperm number, increases sperm activity, reduces the oligospermia and infertility are called as aphrodisiacs.[5,6,9,10,12] There are so many herbal aphrodisiacs found in classical text under “vrisya[9,10]”. They are classified on the basis of pharmacological action.

A. Helps in increase of spermatogenesis : sukra janana

Spermatogenic medicines are Banana, Badam, Musli, Amalaki, cows ghee, Tribulus terrestris, Sesame seeds, Allium cepa, Marjoram nut seeds and cows milk.

B. Helps to maintain the health, wealth of sperm, prevents early ejaculation of semen: sukra sthambhaka.

The medicines in this group are Nutmeg, Arecanut, Symplocos racemosus, Hedychium spicatum, Cypurus rotundus, Cardamom, Sandal wood, Messua ferrea, Shalmali nirryasa – Resin of Shalmali-Shalmalia malabarica

C. Helps to attain sexual disireness for expulsion of semen: sukra rechaka.

Fruits of Solanum nigrum, Banana, Asparagus racemosa, cow's milk, Seeds of Asteracanthus longifolia, Indian liquorice, Sugar candy, Sida Cordifolia, Ipomea tuberosa, Boerhavia diffusa.

D. Helps in improvement of semen quality (number, shape, and volume) :sukra vardhak.

Sida cardifolia, Curculigo orchioidea, Asparagus racemosa, Mucuna prurius, Black gram, White onion, Goose berry, Sugar candy, Indian liquorice etc.

E. Helps in improvement of sperm motility, activity and strength :sukra balya.

Sida cardifolia, Abutilon indicum, Asparagus racemosus, Withania somnifera, Tribulus terrestris, Mucuna prurius, Black gram, Indian liquorice etc.

F. Helps to increase of sexual willingness, loss of libido, erectile dysfunction :sukra uttejaka

Black gram, Drum stick, Sugar candy, Butter, Ghee, Mucuna prurius, Clove, Betel leaf etc.

G. helps to decrease of sexual aggressiveness ,abnormal sexual manners:
sukra hrasaka.

Horse gram, Bitter gourd, Caricus carandus,Holy basil,Commiphora mukul, Borax etc,kshara preparations,stress, night awakening, addictions, few of the cosmetics, colouring agents and preservatives reduces the sperm count.

WHITE MUSLI (CHLOROPHYTUM BORIVILIANUM)

Among the herbal aphrodisiacs the white musli is considered as best because of its psychosomatic ,antistress, adaptogenic, aphrodisiac action[11]. It has a natural biological environmental effect on neuro hormonal sexual axis.It maintains the equilibrium in mind and body.It reduces the sexual harassments like libido, impotency, infertility, and oligospermia.It increases sexual disireness , reduces fatigueness, maintains sexual satisfaction level, reduces the early ejaculation, increases sperm maturity, increases sperm number, increases sperm activity, reduces the oligospermia and infertility. It maintains the mental and physical equilibrium by homeostasis of blood include the regulation of temperature and the balance between acidity and alkalinity i.e ph balance of the body. It reduces the weakness after sexual attachment. The change of environment of body before and after sexual excitement, intercourse and seminal discharge comes to normal state without weakness. It maintains and increases the long duration attachment and satisfaction level. It increases the fertility chance within one year of regular sexual intercourse . it prevents the ageing process by maintaining antioxidant levels ,hormonal levels,vitamins levels , nutritional levels ,ph levels and adaptogenic to change in biological environment .

PHARMACOLOGY OF WHITE MUSLI

Botanical Name :chlorophytum borivillianum

Sanskrit Name: sweta musli

Properties of white musli

Rasa: sweet, Bitter

Guna: Moist, Unctuous

Virya: sheeta(cold)

Vipaka: Madhura(sweet)

The above pharmacological properties of the white musli shows that it maintains a cooling environment on body in all dimentions.[7]

CHEMICAL COMPOSITION OF WHITE MUSLI

The root of white musli is consider for medicinal use. The chemical analysis was done in Regional center of central tuber crops research institute, under Indian council of agricultural research, Bhubaneswar .white Musli dry extract 50%,on analysis it contain saponins 12-17%,stigmasterol 1.9-3.5% , sugars like

arabinose 0.79%, Galactose 3.80%, glucose 0.78%, rhamnose 0.78%, xylose 0.76%, carbohydrates like reducing sugar 20-25%, non-reducing sugar 15-17%, protein 8-8.5% as major constituents. The saponins, stigmasterol, and the sugars are expected to be the aphrodisiacs for sexual life.

CONCLUSION

It is concluded that the herbal aphrodisiac white musli, (*Chlorophytum borovillianum*) is the best among the aphrodisiacs because of its zero side effects, multidirectional sexual benefits. It may be treated to different clinical conditions like sexual harassments like libido, impotency, infertility, and oligospermia. It increases sexual desire, reduces fatigueness, maintains sexual satisfaction level, reduces the early ejaculation, increases sperm maturity, . The change of environment of body before and after sexual excitement, intercourse and seminal discharge comes to normal state without weakness. It maintains and increases the long duration attachment and satisfaction level. It increases the fertility chance within one year of regular sexual intercourse . it prevents the ageing process by maintaining antioxidant levels, hormonal levels, vitamins levels, nutritional levels, pH levels and adaptogenic to change in biological environment. The complex system of hypothalamus-pituitary-gonadal axis is maintained by the system of glands, hormones, and chemical messengers called neurotransmitters which are critical for reproduction.

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