



Antifungal efficiency of some herbal plants: Updated review

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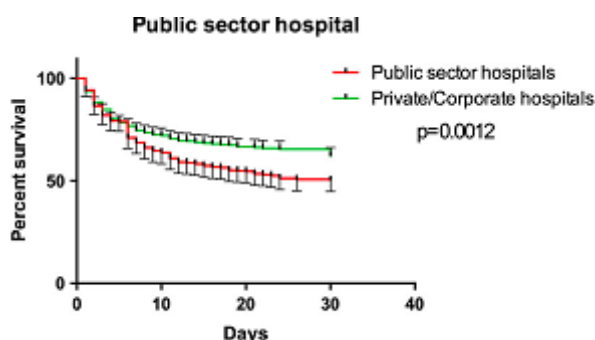
Abstract

The incidence of fungal infection is increasing an alarming rate, presenting an enormous pressure of challenge to healthcare professional for their diagnosis and treatment. Infectious disease represents a critical problem to health and they are in of the main causes of morbidity and mortality worldwide. Ayurveda is time tested science. From ancient to present era its principles never changed. With great logics it cures all types of disease. Since ancient time, plants have been exemplary source of medicine. keeping this view in mind present study work conducted to screen antifungal activity of various infection. Ayurveda medicines along with good hygiene and some lifestyle modification gives best result. The review presented gives the information concerning the Ayurveda remedies.

Keywords: fungal infection, Ayurveda, antifungal activity, Lifestyle modification.

Introduction

In developing countries, micro-organisms are frequently a cause of prevailing diseases presenting a serious public health issue in a population. Fungal infections are common throughout much of the natural world. In humans, fungal infections occur when an invading fungal takes over an area of the body and is too much for immune system to handle. Now a days, fungal infection like Mucor mycosis is spread throughout the world. Mucor mycosis is a serious but rare fungal infection caused by a group of molds called mucoromycetes. Mucor mycosis mainly affect people who have health problems or takes medicines that lower the body ability to fight germs. These infections are usually acquired when spores from the molds are breathed in or less commonly, enter the body though a cut in the skin.



These is currently increase in the number of immune compromised individuals due to advances in the medical technology and a pan epidemic of HIV infections. Fungi of medical importance many be characteristic as primary or opportunistic. The emergence and re-emergence of fungal infection such as candidiasis, cryptococcosis, pneumocystis is quite common. Antifungal drug is a medication used to treat fungal infections such as ringworm, athlete's foot, candidiasis and serious systemic infections. To treat

infections like this drug can be obtained by prescription and can buy from over the counter. But use of this type of drugs used in large way makes unusable due to resistance to antibiotics and with the toxicity during prolonged treatment.

There are large number of drawbacks in synthesis drugs so people were move towards herbal drugs which is safer. Medical science has given three sutras or basic pillars as Hetu (causes), Linga (Symptoms), Aushdha (Medicine), in which Aushdha have unique importance. A microbiologist can analyze the Indian medicinal plant-based drug for its antifungal effects, on pathogens and at different dose.

EX- If a skin diseased patient comes, the skin scrapping can be examined for the type of organism and proved antifungal ayurvedic drugs for the particular organism can be prescribed to cure the patient quickly and effectively.

Many studies investigating the antifungal susceptibility of clinical strains of “Candiba” app have been performed with variety of results. Mainly, the neem, aloe vera, honey, tea tree oil, garlic are used to treat the fungal infection as an ayurvedic remedies. Here, as per provided the little information of activity of medicinal plants on fungal infection.

Classification

Fungal infection is mainly classified in three types as on how it occurs on human body while infection:

- Vicharchika:



- Symptoms: Bahusraava yukta pidika originate in vicharchika
- Causes:
 - Etiological factors including antagonistic food, suppression of natural urges especially vomiting.
 - Quick change in temperature, exposure to excess heat, sudden biological changes in fluids.
 - Excessive quantity of food.

- Paama:



- Symptoms: Scattered pidika with different varna (white, red, black)
- Causes:
 - Excessive heat.
 - Excessive food intake

- Dadru:



- Symptoms: Atasi pushpa like pidika, varna and mandala (round shaped)
- Causes:
 - Intake of wrong food combination like sour curd and milk together makes akin-prone infection.
 - Heavy food intake also cause fungal disease of kapha and pitta dushti.
 - Excessive food intake.
 - Food habits increasing kapha and pitta like oily food, junk food also responsible.
 - Fungal spore transferred from diseased person to healthy person.

Methodology

There are many aspects to use medicines to treat fungal infections which can be:

Ayurvedic aspects:

Ayurveda practiced in India from ancient times to treat many diseases but for fungal infection following remedies can be used:

- Tea tree oil:

This anti-fungal and antibacterial portion is very effective and gives instant results. By adding this to a carrier oil such as olive oil or coconut oil and applying it to infected area can help to cure the infection because it stimulates new cell fungal cell growth.



- Honey:

Raw honey is known for and wide for its healing properties, unpasteurized honey works wonder in terms of killing bacteria and fungus because of its content such as hydrogen peroxide.

- Turmeric:

Turmeric is known to have plenty healing properties. It is and effective antifungal the inhibits growth. Mixing it with good carrier can help to get rid of it.



- Apple cider vinegar:

According to research, apple cider vinegar is a great anti-fungal, anti-bacterial agent. Undiluted apple cider vinegar can prevent growth of fungus because of its acidic properties.



- Garlic:

It is the most powerful antifungal and antimicrobial herbs. It helps to get rid of fungal infection very easily after applying it in infected area.



- Neem leaf:

It is highly considered as highly effective fungal infection cure. As per the researchers it can be an ultimate remedy. Its anti-fungal and natural detoxifier properties have can remove major pathogens and dermatophytes from skin



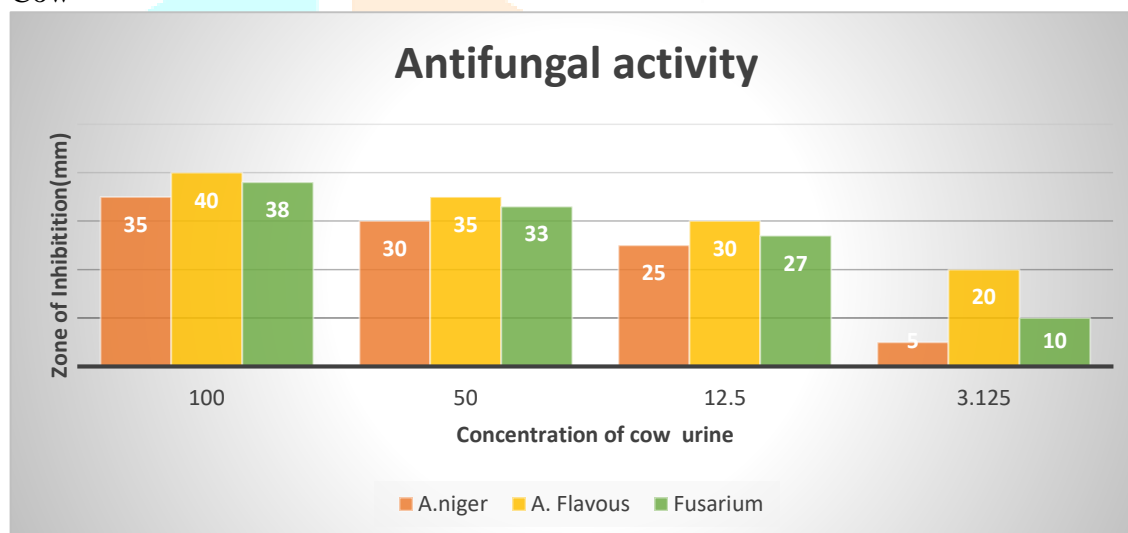
- Aloe vera:

This remedy can aid to inhibit the growth of yeast spores as it contains compounds capable of combating the candida albicans strain.



- Cow

urine:



From recent research studies it is observed that compounds like A. Niger, A. Flavous, Fusarium sp, are helpful in fungal infection treatment which is cost effective and ease at availability.

Allopathy aspects:

- Griseofulvin

- Dose: Adult 500 mg
Child 10 mg/kg with food.
- Duration: corporis 4 wks
Capitis 2 mnths
Pedis 3 mnths
- Comments: Not effective on versicolor or candidiasis.
- Adverse effects: Not common-headache, GI irritation, skin rash, Photosensitivity.

- Terbinafine

- Dose: 250 mg
- Duration: Finger nails 3 mnths
Toe nails 6 mnths
- Comments: Not effective on candidiasis, contraindicated with ketoconazole

- Adverse effects: GI symptoms, rash, taste, disturbances.
- Ketoconazole
 - Dose: 200-400 mg
 - Duration: Corp 3-6 wks
Cap/Man/Pedis 6-8 wks
 - Comments: LFT monitoring, Contra. With terfenadine because of CVS effects.
 - Adverse effects: Hepatotoxicity, Anaphylaxis, Interfere with steroid systems.
- Itraconazole
 - Dose: 100-200mg
 - Duration: Pity 5 days
Corp 5 days
Fin. Nails 3 mnths
Toe nails 4 mnths
 - Comments: Safer than ketoconazole level of drug is higher in epidermis than plasma.
 - Adverse effects: Nausea, vomiting, elevated liver enzymes.
- Fluconazole
 - Dose: 150 mg once a week, 400 mg stat at night.
 - Duration: 3-7 days
 - Comments: With food, Effective in candidiasis
 - Adverse effects: Nausea, vomiting, diarrhea, skin rash.

Limitations:

- Time constraint.
- Scope of discussion
- Lack of previous studies and research data.

Conclusion

To conclude the subject of ayurvedic remedy's role in fungal activities there are various ways to get medication but as every coin has two sides the usage of allopathy to treat fungal infection as of it has some adverse effects like vomiting, nausea, skin rashes and pigmentation for lifetime. Ayurvedic medication can be an option to treat it effectively as this is easy to available, cost effective though it takes long time to treat the infection but it doesn't have any adverse effect on human body and can get rid of it within no expenditure and any mental disturbance. It can suggest that this ayurvedic remedies which are being used for long time in Indian region can help worldwide to cure infections caused by fungus.

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