



Herbal Abortifacient- A Review Article.

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ABSTRACT

Deliberate termination of pregnancy either by medical, surgical or mechanical method before viability of fetus is known as induction of abortion. Many times such abortion done in illegal manner without presence of medical personnel ultimately leading to complications like incomplete abortion, septic abortion, maternal morbidity and mortality. Herbal abortifacient drugs are one of the major component of induced abortion.¹ Detailed knowledge of these abortifacient drugs² can help in reducing maternal morbidity & mortality, to enlist herbs harmful in pregnancy & can be used in research of new herbal originated abortifacient compound as substitute of the conventional abortifacient drugs like Mifepristone to avoid the adverse effect and cost effectiveness from the same³

Keywords: *Herbal Abortifacient, Ayurveda.*

INTRODUCTION

A rising population burdens on the growth of nation resulting into poverty, inadequacy of lifesaving services like food, shelter and life. Specifically in developing countries rising population is matter of concern for social, economic, cultural & environmental factors. This challenge has been dealt with different various methods of population control i.e. contraception like Barrier method, Intra Uterine Contraceptive Devices, Hormonal pills or surgical procedures. Failure of contraception ultimately results into unwanted pregnancy.

Termination of such unwanted pregnancy should be done under the norms of MTP Act. In tribal regions, many couples's practices traditional herbal medicines for induction of abortion. Unfortunately such cases terminates into septic abortion due to unhygienic conditions, wrong route of drug administration, overdose of drug or unavailability of knowledge of antidote & treatment of septic abortion

Septic Abortion is one of the major and preventable cause of maternal mortality. To overcome this, knowledge of such herbal abortifacient is the need of hour .

Here is an attempt to review on herbal abortifacient currently in practices in various regions as well as herbs described with abortifacient properties by classical text.

MATERIALS AND METHODS

Classical references were explored from Ayurveda texts such as Bhavaprakash Nighantu, Relevant research articles & papers from pharmacological journals are also explored.

OBSERVATIONS

Herbal Abortifacient drugs induce terminations of pregnancy in early weeks mainly. These drugs blocks progesterone action leading to placental detachment resulting in expulsion of Abortus.

1. Herbal drugs mentioned in Ayurveda having abortifacient properties are as follows⁴⁻⁷

Sr No	Sanskrit Name:	Latin Name	Family	Parts
1.	Gunja	Abrus Precatorius	Fabaceae	Seeds
2.	Seetaphala	Annona Squamosa	Annonaceae	Seeds, Leaves And Bark.
3.	Arka	Calotropis Procera	Asclepiadaceae	Ksheera
4.	Erand Karkati	Carica Papaya	Caricaceae	Leaves And Fruits
5.	Kesar	Crocus Sativus	Iridaceae	Dried stigma
6.	Chitraka	Plumbago Zeylanica	Plumbaginaceae	Roots
7.	Haramala	Peganum Harmala	Zygophyllaceae	Roots
8.	Pippali	Piper Longum	Piperaceae	Seeds, Roots & Fruit

2. According to Mannan tribes of kerala

List of abortifacients used by Mannan Tribes of Idukki⁸

No.	Botanical name	Family	Local Name	Parts used	Method of Use
1	Acacia catechu (L.f.) Willd.	Fabaceae	Karingali	Bark	3-5 ml. of bark juice is taken orally for the first three months
2	Ananas comosus (L.) Merr.	Bromeliaceae	Kannara	Fruit	Ripened fruit
3	Annona reticulata L.	Annonaceae	Seetha pazham/ Atha	Seeds	Seed paste is given orally on empty stomach for 3-5 days

4	Caesalpinia pulcherrima (L.) Sw.	Fabaceae	Rajamally	Bark	Bark juice aprox 2 ml orally on before food for the first trimester
5	Carica papaya L.	Caricaceae	Kappalam	Raw fruit	10-15 ml of latex of raw fruit is used per orally for single dose in a day for continuous 3 days
6	Curculigo orchoides Gaertn.	Hypoxidaceae	Nilappana		Tuber Past of the tuber is given orally before food
7	Dolichos trilobus L.	Fabaceae	Kattumuthira	Whole plant	juice of whole plant is used to induce abortion in the first trimester
8	Gloriosa superba L.	Liliaceae	Menthonni	Root tuber	extract of root of this plant is given orally for twice a day for 3 consecutive days.
9	Momordica charantia L.	Cucurbitaceae	Pavakka	Raw fruit	Fruit juice is given orally twice a day for 5 days on the first three month.
10	Plumbago zeylanica L.	Plumbaginaceae	Koduveli	Root	3-5 ml. of root paste is taken orally to induce abortion
11	Rhynchosia rufescens (Willd.) DC.	Fabaceae	Ramachempu	Leaf	decoction of leaves of plant is administered for abortion for the first trimester
12	Solanum torvum Sw.	Solanaceae	Ana chunda	Leaf	3-5 ml extract of leaves is given per orally for 5days

DISCUSSION

This article gives elaborative descriptions of herbs which are in practice as a abortifacient drug in different regions. The exact mechanism of action of these drugs has not illustrated anywhere in the classical text. The possible mode of action is as same as other abortifacient drugs like blockage of progesterone support leading to disruption of gravid endometrium or by initiating myometrium contractions.

Though these herbs are currently in practice, there is no definitive treatment or antidote available if these drugs taken in over dosage. There is need to work on it to modify

these preparation with standard dosage, standard operative procedure, antidote, treatment and legal controversies.

CONCLUSION

Septic abortion is one of the major preventable cause of maternal mortality. The herbs discussed above have abortifacient properties. Knowledge of these drugs helps in enlisting contraindicated herbal drugs during pregnancy.

These drugs are natural, cost effective and better compatibility with human body. Research these drugs for development of herbal & safe abortifacient may help in some remote parts of the world, where herbs are the only treatment available to majority of people.

REFERENCES

1. Qureshi AA, Sanghai DB and Padgilwar SS: Herbal options for contraception: A review. *Pharmacognosy Magazine*. 2006; 2(8):204-15.
2. Sinha RK and Nathawat GS: Anti-fertility effects of some plants used by the street herbal vendors for birth control. *Ancient Science of Life*. 1989; IX (2):66-8.
3. Goonasekera MM, Gunawardana VK, Jayasena K, Mohammed SG and Balasubramaniam S: Pregnancy terminating effect of *Jatropha curcas* in rats. *Journal of Ethnopharmacology*. 1995; 47:117- 23.
4. Acharya Vriddha Vagbhata, *Ashtanga Samgraha*, with the Sasilekha Sanskrit commentary by Indu, edited by Dr. Shivaprasad Sharma, chowkhamba Sanskrit Series Office, Varanasi. 2002:965.
5. Acharya Kashyapa, *Kashyapa Samhita*, Edited by Prof. (km) P.V.Tewari with Dr. Neeraj Kumar, Dr. R.D. Sharma and Dr. Abhimanyu Kumar, Published by Chaukhamba Visvabharati, Varanasi. 2013:112.
6. Acharya Sushruta, *Sushruta Samhita*, Nibhandhasangraha commentary of Sri Dalhanacharya, edited by VaidyaJadavji Trikamji Acharya, Chaukhamba Surbharati prakshan, Varanasi. 2012:824.
7. Acharya Sushruta, *Sushruta Samhita*, Nibhandhasangraha commentary of Sri Dalhanacharya, edited by VaidyaJadavji Trikamji Acharya, Chaukhamba Surbharatiprakshan, Varanasi. 2012:82
8. Ajesh T.P. et al. Herbal abortifacient used by mannan tribes of Kerala , India, *International journal of Pharm Tech Research* Vol.4, No.3, pp 1015-1017, July-Sept 2012