Medicinal Plants with Abortifacient Activity

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Abstract

Introduction: Plants, which are source of a large proportion of bioactive components, have been used for the treatment of several human ailments for thousands of years. Many herbal remedies are traditionally used as contraceptives, abortifacients, emmenagogue or oxytocic agents. The term "abortion" actually refers to any premature expulsion of a human fetus, whether naturally spontaneous or artificially induced. An abortifacient is a substance that induces abortion. In case of medical abortion techniques and usage of medicines, it has more disadvantages and side effects, but according to the studies medicinal plants have better compatibility with the human body that can cause abortion with different mechanisms. The purpose of this study is to review the medicinal plants and natural products used to induce abortions.

Methods and Results: Searching keywords such as medicinal plant, natural compound, abortion and abortifacient resulted in many published articles. Many medicinal plants have been reported in literatures with antifertility effect and some of them reported as abortifacient which belonged to different plant families like Fabaceae (Dolichos trilobus), Apiaceae (Apium graveolens), Amaryllidaceae (Allium sativum), Rutaceae (Ruta graveolens), Apocynaceae (Holarrhena pubescens) and etc. Based on the researches, medicinal plants can cause abortion with different mechanisms including estrogenic activity, increases menstrual flow and induces abortion, Uterine stimulant, increase the risk of bleeding, Uterine Contraction, Uterotrophic activity and stimulant action on uterine muscles. Some articles were referred for citing the proved abortifacient effects of plants or isolated constituents in laboratory animals. Some of these phytoconstituents include Yuanhuacine from Daphne genkwa, Methyl aristolate from Aristolochia indica, Momorcochin from Momordica cochinchinensis, Plumbagin from Plumbago zeylanica.

Conclusions: Abortion can be caused by abortifacient medicines or medicinal plants. Although using abortifacient pills or new techniques are faster, but since the medicines have disadvantages and side effects, it is beneficial to use plants. Some medicinal plants have abortifacient potential and there is a need to more clinical studies and newer techniques from these plants and their natural components.

Key words: Abortion, Abortifacient, Medicinal plants, Natural compound