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Review Article

HYPERTENSION AND HERBAL PLANTS

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ABSTRACT
High blood pressure, termed "hypertension," is a condition that afflicts almost 1 billion people worldwide and is a leading cause of morbidity and mortality. More than 20% of Americans are hypertensive, and one-third of these Americans are not even aware they are hypertensive. Therefore, this disease is sometimes called the "silent killer." This disease is usually asymptomatic until the damaging effects of hypertension (such as stroke, myocardial infarction, renal dysfunction, visual problems, etc.) are observed. Hypertension is a major risk factor for coronary artery disease and "heart attacks," which may require coronary artery bypass surgery.
This study describes the antihypertensive activities present in herbal plants. Herbal medicine has made many contributions to commercial drug preparations manufactured today herbal medicine has been losing ground to new synthetic medicines touted by scientists and physicians to be more effective and reliable.
Keywords: Hypertension, Medicinal plants, Antihypertensive herbal plants.

INTRODUCTION

Cardiovascular disease (CVD) is the leading cause of death worldwide. Hypertension is the most common cardiovascular disease and a major public health problem in both developed and developing countries. The disease affects both sexes and more and more patients are turning up at younger ages. Hypertension is the leading member of the group of so called "non-communicable diseases" (NCD) and a leading Contributory cause of death worldwide.[4] It is believed that hypertension contributes about 57 per cent towards all deaths from strokes and 24 per cent towards all deaths from coronary artery disease.

Hypertension is reported to be the fourth contributor to premature death in developed countries and the seventh in developing countries. High blood pressure is the most common and responds well to lifestyle changes, such as losing weight, dietary changes, exercise, and stress reduction. Natural treatment of essential hypertension can bring blood pressure values into the normal range; however, if lifestyle changes are not maintained, hypertension will probably return. Secondary hypertension has an organic cause (i.e., kidney disease, pregnancy) and must be evaluated and monitored by a physician since the underlying cause must also be addressed. It often takes some time to find the best treatment for pulmonary hypertension.

CONCLUSION

Herbal medicines are being used by about 80% of the world population particularly in the developing countries for the primary health care. The natural products should be considered as the best in primary health care because of better cultural acceptability, safety, potent, inexpensive and lesser side effects. Several herbal medicines and supplements have been studied as potential therapeutic agents in the management of hypertension and its related complications.

PLANTS CONTAINING ANTIHYPERTINSIVE ACTIVITY

Plant name	Ayurvedic /common name	Part used	Antihypertensive & other beneficial effects	Reference
Carom capticum	Ajvan	Leaves	Antihypertensive, Antispasmodic	2
Oleo europaea	Olive tree	Leaves	Antihypertensive, Hypoglycemic, Antioxidant	3
Lepidium sativum	Garden cress	Leaves	Antihypertensive, Diuretic	4
Eucommia ulmoides	Eucommi Bark	Leaves	Antihypertensive	5
Laelia autumnalis	Autumn Flowering Laelia	Roots	Antihypertensive, Vasorelaxant	6
Tribulus terrestris	Tribulus	Leaves	Antihypertensive, Vasodilator	7

Mesona procumbens	Vanilla	Seed	Antihypertensive	8
Errachidia province	Errachidia	Leaves	Antihypertensive, Diabetes mellitus	9
Phyllanthus urinaria	Bhuiaonla	fruit, leaf, flower	Antihypertensive, Anti- inflammatory	10
Cuscuta japonica	Japanese dodder	Leaves	Antihypertensive	11
Agastache Mexicana	Mexican Giant Hyssop	Bark	Antihypertensive	12
Tropaeolum majus	Indian Cress	Seed, leaf, flower	Antihypertensive	13
Laelia anceps	The bull	Roots	Antihypertensive, Vasorelaxant	14
Cocos nucifera	Coconut palm	Seed	Antihypertensive, Vasorelaxant	15
Coriandrum sativum	Coriander	Fruit	Antihypertensive, Dyspepsia	16
Elettaria cardamomum	Cardamom	Fruit	Antihypertensive	17
Guazuma ulmifolia	Rudrakshi	Bark	Antihypertensive ,Vasorelaxant	18
Fritillaria ussuriensis maxim.	Spring wild flower	Bulb	Antihypertensive	19
Clerodendron trichotomum	Glory Tree	Stem	Antihypertensive	20
Tanacetum vulgare L.	Saunf	Leaf	Antihypertensive , Vasorelaxant	21
Aronia mitchurinii	Chokeberry	Fruit	Antihypertensive	22
Hibiscus sabdariffa	Jamaica sorrel	Leaves	Antihypertensive	23
Cecropia pachystachya	Ambay	Leaves	Antihypertensive	24
Borago officinalis	Borage	Leaves	Antihypertensive, Vasodilator	25
Loranthus ferrugineus	Benalu	Leaves	Antihypertensive, Vasodilator	26
Lepechinia caulescens	Pitcher Sage	Leaves	Antihypertensive	27
Periploca laevigata	Periploca laevigata	Bark, Roots	Antihypertensive	28
Leonurus cardiaca var	Guma	Aerial parts	Antihypertensive	29
Eugenia uniflora	Pinang	Leaves	Antihypertensive	30
Citrus limetta	sweet lemon	Fruit	Antihypertensive	31
Cirsium japonicum	Five flavour berry	whole plant	Antihypertensive, Hemorrhage	32
Averrhoa carambola	Starfrui	Leaves	Antihypertensive	33
Valeriana wallichii	Valerian Jatamansi	Rhizome	Antihypertensive	34
Allium sativum	Garlic	Fruit	Antihypertensive, Vasopressor	35
Astragalus complanatus	Gurmar	Seeds	Antihypertensive	36
Erythroxylum gonocladum		Aerial parts	Antihypertensive	37
Melothria maderaspatana	Melon-gubat	Leaves	Antihypertensive, Antioxidant	38
Sclerocarya birrea	Marula	Stem- bark	Antihypertensive, Vasorelaxant	39
Achillea millefolium	Plumajillo	Leaves	Antihypertensive	40
Phyllanthus acidus	Rai awla	Leaves	Antihypertensive	41
Panax ginseng	Ninjin	Roots	Antihypertensive, Immunomodulator	42
Geum japonicum	Daikon-sou	Leaves	Antihypertensive, Vasorelaxant	43
Cudrania tricuspidata	Mandarin melon berry	Leaves	Antihypertensive, Renal dysfunction	44
Graptopetalum paraguayense	Ghost Plant	Leaves	Antihypertensive	45
Echinodorus grandiflorus	Corazón	Leaves	Antihypertensive ,Anti-inflammatory	46
Antrodia camphorata	Niuchangchih	Fruiting bodies	Antihypertensive ,Liver disease	47
Polyalthia longifolia	Ashoka	Bark, Root	Antihypertensive	48
Jatropha gossypiifolia L.	Red physic nut	Leaves	Antihypertensive, Vasorelaxant	49
Solanum torvum	Susumber	Fruits	Antihypertensive, Cardiac hypertrophy	50
Globimetula cupulata	Guinea-bissau balanta	Leaves	Antihypertensive , Hypoglycemic	51

Crocus sativus	Saffron	Stigma	Antihypertensive	52
Momordica charantia	Bitter Melon	Whole plant	Antihypertensive, Diabetes	53
Harpephyllum caffrum Bernh	Wild plum	stem, bark	Antihypertensive, Diabetes	54
Salvia cinnabarina	Galeotti	Leaves	Antihypertensive	55
Catharanthus roseus	Vinca rosea	Leaves	Antihypertensive, Hypolipidemic	56
Ulmus macrocarpa	Large-fruited Elm	Root bark	Antihypertensive, Vasorelaxant	57
Saururus chinensis	San bai cao	Root	Antihypertensive , Vasorelaxant	58
Retama raetam Forssk	White Weeping Broom	Leaves	Antihypertensive , Diuretic	59
Passiflora edulis rind	Passion Fruit	Leaves	Antihypertensive, Vasodilator	60
Opuntia dillenii cladodes	Sweet Prickly Pear	Leaves	Antihypertensive	61
Pleurotus nebrodensis	White Ferula Mushroom	Fruits	Antihypertensive	62
Nigella sativa	Black cumin	Seeds	Antihypertensive	63
Gynura procumbens	Akar Sebiak	Leaves	Antihypertensive	64
Raphanus sativus	Radish	Leaves	Antihypertensive ,Vasodilator	65
Mammea africana	African apple	Stem- bark	Antihypertensive ,Vasodilator	66
Coscinium fenestratum	Gaertn	Leaves	Antihypertensive, Vasorelaxant	67
Calycotome villosa	Spiny Broom	Leaves	Antihypertensive ,Vasorelaxant	68
Buddleja crispa	Himalayan Butterfly Bush	Leaves	Antihypertensive, Antispasmodic	69
Ekebergia capensis	Dog plum	Leaves	Antihypertensive	70
Persea americana Mill	Avocado	Leaves	Antihypertensive, Cardiac dysfunctions	71
Ficus exasperate	Brahma's Banyan	Leaves	Antihypertensive, Anti-ulcer	72
Jacaranda mimosaefolia	Jacaranda	Leaves	Antihypertensive ,Hypothermic	73
Artemisia herba alba	Armoise blanche	Leaves	Antihypertensive	74
Hyptis fruticosa	Alecrim-de-tabuleiro	Leaves	Antihypertensive	75
Gastrodia elata Blume	Rhizoma Gastrodia Elatae	Rhizome	Antihypertensive	76

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