

THE PHARMA INNOVATION - JOURNAL

Review on the contribution of Ura-Marunnu, a traditional baby care practice in southern India

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Children's health encompasses the physical, mental, emotional, and social well-being of children from infancy through adolescence. Child and maternal care practices are now being considered as important complements to increasing household income or targeted food interventions to address child growth needs. Traditional medicine has a long history of serving people all over the world. Ura-marunnu is a traditional baby care practice comprising of a group of drugs administered to child from day one in the form of paste widely practised in the states of Kerala, Karnataka, Goa and Tamil Nadu. The current paper will be a review through the various ingredients, traditional uses and pharmacological profile of the same (Ura-marunnu).

Keyword: Ura-marunnu, Traditional baby care, Traditional medicine, New-born care, Child Growth, Herbal Medicine.

1. Introduction

Health care comprises the prevention, treatment, and management of illness and the preservation of mental and physical well-being through services offered by health professionals. Effective health care is an important aspect of promoting good health^[1]. Children represent the future, and ensuring their healthy growth and development ought to be a prime concern of all societies. New-borns are particularly vulnerable and children are

vulnerable to malnutrition and infectious diseases, many of which can be effectively prevented or treated^[2]. Children's health encompasses the physical, mental, emotional, and social well-being of children from infancy through adolescence^[3]. Child and maternal care practices are now being considered as important complements to increasing household income or targeted food interventions to address child growth needs.

Traditional medicine has a long history of serving people all over the world. It is the sum total of knowledge. Traditional medicine-inspired approaches remain important especially for the management of chronic diseases as well as to facilitate natural product drug discovery^[4-5]. Natural products either as pure compounds or as standardized plant extracts are the right solutions because of their unmatched display of chemical diversity^[6]. Ethnopharmacology and traditional knowledge-inspired approaches have been useful in drug discovery and development^[7]. According to World Health Organization (WHO) more than 80% of the world's population, mostly in poor and less developed countries depend on traditional plant based medicines for their primary health care needs^[8].

Ura-marunnu

Ura-marunnu is a traditional baby care practice comprising of a group of drugs administered to child from day one in the form of paste. In the southern part of India, especially in the states of Kerala, Karnataka, Goa and Tamil Nadu, practice of preparing paste of herbal drugs i.e., Ura-marunnu and administering to the children.

2.1 Ingredients of Ura-marunnu: The different ingredients of Ura-marunnu have been shown in table 1.

2.2 Method of preparation: The different ingredient drugs are triturated with Breast milk / Honey / Cow's milk / Butter in a mortar and administered to children^[9].

2.3 Time: Once in a week.

2.4 Age: Starting from new born till the age of 2 years.

2.5 Benefits of this procedure are: It is a preventive and curative aid for digestive disorders in infants and children. It helps to ease griping, stomach discomfort, flatulence and colic and has a calming effect on the digestive system. Added to these it is also Balya (increases strength), Deepana (increases appetite), Pachana (kindles

the digestive fire), Grahi (absorbs the excess moisture), Vyadhikshamatvakaraka (increases immunity), Roghaghna (destroys diseases), Medhyam (increases intellect), Bhootagham (destroys evil spirits), Nidrakaraka (induces sleep) and Soolaghnam (removes pain). Coming to the detailing of the different ingredients of Ura-marunnu;

A. *Cassia auriculata* L.

Cassia auriculata Linn. commonly known as Tanner's cassia belongs to family Caesalpiniaceae and is distributed throughout the hot deciduous forests of India^[18]. It's a bushy small plant which attains a height of about 3-10 feet. Leaves are about 3-4 inch long. Flowers are large in size and is of yellow colour^[21].

This plant contains 18% of tannins in its bark. Its leaves also possess Di-ethyl hexyl phthalate. Besides these it contains alkaloids and resins. Presence of vitamins and minerals like calcium and phosphorus has also been reported.²¹ This plant is also said to contain a cardiac glycoside (sennapicrin) and sap, leaves and bark yield anthraquinones, while the latter contains tannins^[20]. The plant is reported as hepatoprotective^[10], antibacterial^[11], antipyretic^[12], antioxidant^[13], anthelmintic^[14], diuretic^[15], liver protective^[16], antiulcer^[17] and antihyperglycemic^[19].

B. *Psoralea corylifolia* Linn.

It grows throughout the plains of India, especially in Himalayas and in the regions of Rajasthan, Punjab, Uttar Pradesh, Dehra Dun, West Bengal, Bihar, Deccan, Karnataka and in the tropical and subtropical regions of China and Southern Africa^[31-34]. It is an erect annual herb of about 30 -180 cm high. Leaves broadly elliptic, incisodentate; flower yellow or bluish purple.

The major active constituents of *Psoralea corylifolia* are corylifols a-c (prenylfoavanoids) that are present in the seeds^[35], other active compound such as psoralen, isopsoralen and neobavaisflavones

are found in the dried ripe fruits^[36]. Daidzein (4:7 dihydroxyisoflavon) and genistein (4'5'7 trihydroxyisoflavon) are presence in natural plants of *P. corylifolia* as well as in-vitro cultures^[37]. Other active constituents have since been identified, including neobavaisflovone, borachin, Bavaisfavoos, bavachalcone, bavachromene psoralidin, corylifolinin, barachini psoralenoside, isopsoralenoside and coumarins^[38-39]. The plant is reported to possess antibacterial^[22], antifungal^[23], antitumor^[24], pesticidal^[25], anti-inflammatory^[26], anthelmintic^[27], hepatoprotective^[28], osteoblastic proliferative^[29], and antioxidant activities^[30].

C. *Santalum album* Linn

Santalum album L. is found in the tropical mountainous regions of Southern India, Sri Lanka and several islands of the Indonesian archipelago^[47]. It is a small evergreen glabrous tree with slender drooping branches. The heartwood yellowish brown strongly scented. Leaves of dimension 3.8-6.3 by 1.6 to 3.2 cm^[48].

The oil consists about 90-97% of sesquiterpene alcohols, which is distinguished for the purpose of analysis as 'santalol'^[49]. The plant is reported to possess antifungal^[40], antibacterial^[41-42], antiviral^[43], skin cancer and chemo preventive^[42], antioxidant^[43], anti-ulcerogenic^[44], sedative^[45], anti-inflammatory^[45-46], and antipyretic^[46] properties.

D. *Elettaria cardamomum* Maton.

Elettaria cardamomum Maton belongs to Scitamineae family is commonly known as "cardamom." It is a perennial herb, indigenous to India, Pakistan, Myanmar and Sri Lanka^[60]. It has a large, fleshy rhizome, and the alternate, lanceolate leaves are blades from 1 to 2 1/2 feet long, smooth and dark green above, pale, glaucous green and finely silky beneath. The flowering stems spread horizontally near the ground, from a few inches to 2 feet long, and bear small, loose racemes^[63].

Phytochemical studies revealed that cardamom contains α -terpineol, myrcene, heptane, subinene, limonene, cineol, menthone, α -pinene, β -pinene, linalol, nerolidol, β -sitostenone, phytol, eugenyl acetate, bisabolene, borneol, citronellol, geraniol, geranyl acetate, stigmaterol and terpinene^[61-62]. The plant is reported to possess analgesic^[50-51], antiulcerogenic^[52], antiasthmatic^[53], gut modulatory, blood pressure lowering, diuretic and sedative activities^[54], blood pressure lowering, fibrinolysis enhancing, antioxidant^[55], antibacterial, antifungal, antiviral, carminative, diuretic^[56-57], gastroprotective^[58], immunomodulatory and anti-cancer activities^[59].

E. *Curcuma longa* Linn.

Curcuma longa Linn. belonging to family Scitamineae is a tall herb cultivated throughout tropical and other regions in India. It is a perennial herbaceous plant, which reaches a stature of up to 1 meter. There are highly branched, yellow to orange, cylindrical, aromatic rhizomes^[127].

The most important chemical components of turmeric are a group of compounds called curcuminoids, which include curcumin (diferuloylmethane), demethoxycurcumin, and bisdemethoxycurcumin. The best studied compound is curcumin, which constitutes 3.14% (on average) of powdered turmeric^[128]. In addition there are other important volatile oils such as turmerone, atlantone, and zingiberene. Some general constituents are sugars, proteins, and resins^[129]. The plant is reported to possess antimicrobial^[64], antiviral^[65], anti-inflammatory^[66-70], immunomodulatory^[71], cardio-protective^[72-80], anti-cancerous^[81-94], neuroprotective^[95-104], anti-diabetic^[105-111], renal protective^[112-116], lung protective^[117], gastro-protective^[118-120], chemoprotective^[121-123], synergistic effect^[124], antidermatophytic^[125], and antiallergic activities^[126].

F. *Terminalia chebula* Retz.

Terminalia chebula Retz. belongs to the family Combretaceae, commonly called as Black myrobalan, Ink tree or Chebulic myrobalan. It is a medium to large highly branched deciduous tree with a height up to 30 m and girth 1-1.5 m. Leaves are 10-30 cm long elliptical with an acute tip and cordate base. It is a native of Asia, but also found in Nepal, Sri Lanka, Myanmar, Bangladesh, Egypt, Iran and Turkey and also in Pakistan and Yunnan, Tibet, Guangdong, Guangxi province of China. In India, it grows in deciduous forests of Himachal Pradesh, Tamil Nadu, Kerala, Karnataka, Uttar Pradesh, Andhra Pradesh and West Bengal^[165].

It is a rich source of tannins and other phenolic compounds, some triterpenes and/or their glycosides were also reported from the plant. Researchers have isolated a number of glycosides from Haritaki, including the triterpenes arjunglucoside I, arjungenin, and the chebulosides I and II. Other constituents include a coumarin conjugated with gallic acids called chebulin, as well as other phenolic compounds including ellagic acid, 2,4-chebulyl- β -D-glucopyranose, chebulinic acid, gallic acid, ethyl gallate, punicalagin, terflavin A, terchebin, luteolin, and tannic acid^[166]. Chebulic acid is a phenolic acid compound isolated from the ripe fruits^[167-168]. Luteic acid can be isolated from the bark^[169]. It also contains terflavin B, a type of tannin while chebulinic acid is found in the fruits^[170].

The plant is reported to possess antioxidant^[130], antibacterial^[131-132], antifungal^[133-134], anticancer^[135], antiviral^[136-137], antiulcer^[138], antidiabetic^[139-140], wound healing^[141-142], anticonvulsant^[143], antimutagenic^[144-145], anticaries^[146], cardio protective^[147], radiation protective^[148], cytotoxic^[149], immunodulatory^[150], antiamebic effect^[151-152], antiplasmodial activity^[153-154], molluscicidal^[155], anthemintic^[156], antioxidant^[157-160], antiarthritic^[161], antispermatic^[162],

hypolipidemic and hypocholesterolemic activities^[163-164].

G. *Ferula asafoetida* L.

Ferula asafoetida L. is the dried latex (gum oleoresin) exuded from the living underground rhizome or tap root of several species of *Ferula*, which is a perennial herb (1 to 1.5 m high). The species is native to the mountains of Afghanistan, and is mainly cultivated in nearby India. It is a herbaceous, monoecious, perennial plant of the umbelliferae family.

Typical asafoetida contains about 40–64% resin, 25% endogeneous gum, 10-17% volatile oil, and 1.5–10% ash. The resin portion is known to contain asaresinotannols 'A' and 'B', ferulic acid, umbelliferone and four unidentified compounds^[202]. The drug has been studied in detail for its efficacy on gastro intestinal tract^[171-176], cancer^[177-183], gene expression^[183-188], blood pressure^[189-192], as chemoprotective^[193-197], hypersensitivity reactions^[198-199], hepatoprotective^[200], central nervous system and heart^[201], and as antioxidant^[180].

H. *Myristica fragrans* Houtt.

Myristica fragrans Houtt. belongs to Myristicaceae family and is believed to be a native of Banda Islands of Eastern Indonesia, formerly called the 'Spice Islands'. In India it is mainly cultivated in South India particularly in certain pockets of Kerala, Tamil Nadu and Karnataka^[216]. It is a dioecious or monoecious tree, bushy and evergreen, 9-12 m tall. The fruit is a one-seeded fleshy drupe, succulent, pendulous, smooth, 6-9 cms long and nearly as broad^[217]. The plant is reported to possess antimicrobial^[203-209], anticancer^[210], hepatoprotective^[211], antioxidant^[212], antiinflammatory^[213], antithrombotic^[214], hypolipidaemic and antiatherosclerotic effects^[215].

I. *Celastrus paniculatus*

Celastrus paniculatus Willd. syn. *C. multiflorus* Roxb., (Celastraceae) is a hardy shrub that grows in a wide variety of climates and environments^[245]. It is native to the Indian continent, but is known to grow wild in Australia, China, Taiwan, Cambodia, Indonesia, Laos, Malaysia, Myanmar, Nepal, Sri Lanka, Thailand, Vietnam as well as many of the Pacific islands^[246]. In India it is cultivated in Kerala and Tamil Nadu.

The chemical constituents present in seeds of *Celastrus paniculatus* are β sitosterol, linolenic acid, palmitic acid, linoleic acid and β amyirin^[247]. The plant is reported to exhibit effect on central nervous system^[218-229], cardiovascular system^[230], and also possess antifertility^[231-232], analgesic and anti-inflammatory^[233-234], hypolipidaemic^[235], antioxidant^[236-238], anti-arthritic^[239], wound healing^[240], antimalarial^[241], antibacterial^[242-243] and antifungal properties^[244].

J. *Holarrhena antidysenterica* (Linn.)

H. antidysenterica commonly known as kurci, kurchi or kutaj is one of the important medicinal herbs of the family Apocynaceae. It is a large tree of 30 to 40 feet in height. Its flowers color white and fruits of half inch in size. A large to small sized deciduous tree, yielding milky latex.

The alkaloid isolated from the plant, mostly from the bark include conessine, kurchine, kurchicine, holarrhimine, conarrhimine, conaine, conessimine, iso-conessimine, conimine, holacetin and conkurchin^[257]. The plant is reported to possess anti-amoebiasis^[248-249], antidiabetic^[250-252], in gut motility disorders^[253], anti-amoebiasis^[254-255], antibacterial^[256] and antidiarrheal activities^[256].

K. *Allium sativum* L.

Allium sativum, belongs to the family Alliaceae^[307], commonly known as garlic, is native to central Asia, and has long been a staple in the Mediterranean region, as well as a frequent seasoning in Asia, Africa, and

Europe^[305]. It is a bulbous plant growing up to 1.2 m (4 ft) in height.

The active components of *A. sativum* include antioxidants such as organosulfur compounds, free radicals scavenger flavonoids such as allixin, trace elements such as germanium (normalizer and immunostimulant), selenium (for optimal function of the antioxidant enzyme glutathione peroxidase), volatile oil containing sulfur compounds, amino acids and other bio-active compounds^[306]. The plant is reported to possess antimicrobial^[258], antituberculosis^[259], antioxidant^[260], antihypertensive^[261-270], anti-atherosclerotic^[271-276], anti-thrombotic^[277-279], lipid lowering^[280-283], antidiabetic^[284-286], anticancerous^[287-300], neuroprotective^[301], nephroprotective^[302], immunomodulatory^[303-304], anti-inflammatory^[308-313], and antibacterial activities^[314-320].

L. *Piper nigrum* L.

Piper nigrum L. popularly known as Maricha belonging to the family Piperaceae, an important medicinal plant is used in traditional medicine in Asia and Pacific islands especially in Indian medicine^[331]. The fruit, known as a peppercorn when dried, is approximately 5 millimetres (0.20 in) in diameter, dark red when fully mature.

The essential oil is composed of α -thujone, α -pinene, camphene, sabinene, β -pinene, α -phellandrene, myrcene, limonene, caryophyllene, β -farnesene, β -bisabolene, linalool and terpinen-4-ol^[332]. The plant is reported to possess antibacterial^[321], antidepressant^[322], antifungal^[323], analgesic^[324], antidiarrheal^[325], anti-inflammatory^[324-325], antioxidant^[326], immunomodulatory^[327], antispasmodic^[328], antiasthmatic^[329], antitumour^[327], hepatoprotective properties^[330].

M. *Quercus infectoria* Olivier

Quercus infectoria Olivier belonging to family Fagaceae is a small tree widely distributed in Greece, Asia Minor and Iran.

The tree bears galls that emerge on its shoots as a consequence of attack of gall wasp, *Cynpis gallae-tincotoriae*^[344].

The constituents of galls comprise a large amount of tannins, gallic acid, syringic acid, ellagic acid, β -sitosterol, amentoflavone hexamethyl ether, isocryptomerin, methyl betulate, methyl oleanate and hexagalloyl glucose^[345-346]. The plant is reported to possess antidiarrhoeal^[333], anti-amoebic^[334], antibacterial^[335], antifungal^[336], larvicidal^[337], antidiabetic^[338], local anaesthetic^[339], antiviral^[340], anti-inflammatory^[341], hepatoprotective^[342] wound healing properties^[343].

N. *Coleus aromaticus* Benth

The *Coleus aromaticus* Benth belong to family Lamiaceae, commonly known as Patta Ajwain is a native species from Asia. It is a large succulent aromatic perennial herb. Much branched fleshy highly aromatic herb^[363]. Butylaniside, -caryophyllene, carvacrol, 1-8-cineole, p-cymene, ethylsalicylate, eugenol, limonene, myrcene, and -pinenes, -selenene, -terpinene, terpinen-4-ol, thymol, verbenone (essential oil), apigenin, chrysoeriol, 5,4-dihydroxy-6,7-dimethoxy-flavone (cirsimaritin), eriodictyol, 6-methoxygenkawanin, luteolin, quercetin, salvigenin, taxifolin, oxaloacetic acid, crategolic, euscaphic, 2-3-dihydro-olean-12-en-28-oic, pomolic, oleanolic, tormentic, 2,3,19,23-tetrahydrours-12-en-28-oic, -sitosterol-D-glucoside isolated from the leaves. The plant is reported to possess antioxidant^[347-354], antimicrobial^[355-357], anthelmintic^[358], antiepileptic^[359], antitumor and antimitagenic^[360], neuropharmacological^[361] and radioprotective properties^[362].

O. *Piper longum* L.

Piper longum L. belonging to family Piperaceae, popularly known in India as Pippali, is used as traditional medicine in Asia, especially in Indian medicine and in Pacific islands^[371]. *Piper longum* Linn is a

slender, climbing, under shrub, creeping and rooting below. The young shoots are downy; the leaves are 5-9 cm long, 5 cm wide, ovate, cordate with broad rounded lobes at the base, sub-acute, entire, glabrous^[372].

Major chemical constituents are alkaloids piperine, piperlongumine, piperlonguminine and also methyl-3,4,5-trimehoxycinnamate^[373]. The plant is reported to possess immunomodulatory^[364], antibacterial^[365-367], antiasthmatic^[368], hepatoprotective^[364], hypocholesterolaemic^[374], anti-inflammatory^[369] and anti-amoebic activities^[370].

P. *Elaeocarpus ganitrus* Roxb

Elaeocarpus ganitrus Roxb. is a large evergreen broad leaved tree belonging to Elaeocarpaceae family. It is a large and evergreen tree commonly known as Utrasum Bead tree. It grows in the area from the Gangetic plain in the foothills of the Himalayas to South-East Asia, Nepal and Indonesia. Rudraksha seeds are covered by an outer shell of blue colour when fully ripe, and for this reason are also known as blueberry beads^[382].

Active constituents present in Rudraksha are elaeocarpidine, elaeocarpine, rudrakine, flavonoids quercetin. The plant is reported to possess antioxidant^[375], antifungal^[376], antibacterial^[377], anxiolytic^[378], anticancer^[379], antihypertensive^[380], antidiabetic^[381], anti-asthmatic^[376], anti-inflammatory and analgesic activities^[381].

Q. *Zingiber Officinale* Roscoe

Zingiber officinale Roscoe, commonly known as ginger belongs to family Zingiberaceae is cultivated commercially in China, Nepal, US, India, Bangladesh, Taiwan, Jamaica, Nigeria and some other parts of world^[395]. It is a tropical plant and highly adapted to grow in sub-tropical areas also. *Z. officinale* grows well in warm and humid conditions from sea level up to 1500 m above sea level.

The fresh and dried *Z. officinale* extracts have been reported to possess [6]-gingerols, [8]-gingerols, [10]-gingerols, 1,7-bis-(40-Hydroxy-30-methoxyphenyl)-3,5-heptadione, adenine, 1-Dehydro-3-dihydro-[10]-gingerdione, Acetoxy-6-dihydroparadol, [4]-Isogingerol, 5 Methoxy-[6]-gingerol, Methyl diacetoxy-[4]-gingerdiol, Methyl diacetoxy-[10]-gingerdiol, 1-Dehydro-[3]-gingerdione, Acetoxy-[4]-gingerol, [4]-Shogaol, [6]-Shogaol, [8]-Shogaol, [10]-Shogaol, [12]-Shogaol, [6]-Paradol, [7]-Paradol, [8]-Paradol, [9]-Paradol, [10]-Paradol, [11] Paradol, [13]-Paradol, 1-(40-Hydroxy-30-methoxyphenyl)-7-octen-3-one, 1-(40-Hydroxy-30-methoxyphenyl)-7-decen-3-one, 1-(40-Hydroxy-30-methoxyphenyl)-7-dodecen-3-one, beta-sitosterol palmitate, isovanillin, glycolmonopalmitate, hexacosanoic acid 2,3-dihydroxypropyl ester, maleimide-5-oxime, p-hydroxybenzaldehyde and 1-(omega-ferulyloxyceratyl) glycerols^[401-403]. The plant is reported to possess anti-cancer^[383-385], anticoagulant^[386], antiemetic^[387], anti-inflammatory^[388], antioxidant^[389], antibacterial^[390], antimicrobial^[391], antigenotoxic^[392], antiarthritic^[393], immunomodulatory^[394], hepatoprotective^[396], nephroprotective^[397] and anti-diabetic properties^[398-400].

R. *Acorus calamus* Linn.

Acorus calamus Linn. commonly known as Sweet Flag, belongs to the family Araceae. It is a herbaceous perennial with a long indefinite branched cylindrical rhizome which is about 3/4 inch in diameter, smooth, pinkish or pale green^[405]. *Acorus calamus* is a native of eastern countries and indigenous to the marshes of the mountains of India. It is cultivated throughout India in the marshy tracts of Kashmir, Himachal Pradesh, Manipur, and in Nagahills and in the Koratagere taluka of Karnataka state in peninsular India^[406].

Calamus has the constituent such as alkaloids, flavanoids, gums, lecitins mucilage, phenols, quinine, saponins, sugars, tannins and

triterpenes. The plant is reported to possess anti-microbial, anti-fungal, anti-oxidant, bronchiodilatory, antidiabetic, antiinflammatory, antihepatotoxic, antimutagenic, immunosuppressive, antiulcer and anticancer activities^[404].

S. *Embelia ribes* Burm.f.

Embelia ribes Burm. f., belongs to family Myrsinaceae. It is found throughout India up to an altitude of 1600 m, from Central Himalaya to Konkan, Deccan, Western Ghats and South India. A large, scandant shrub with long slender, flexible, terete branches; bark studded with lenticles.

The chemical constituents like embelic acid, volatile oil, fixed oil, resin, tannin, christembine (alkaloid), phenolic acids like caffeic acid, vanillic acid, chlorogenic acid, cinnamic acid, ocumaric acid^[407]. The plant is reported to possess hepatoprotective, analgesic, anthelmintic, anti-bacterial, antioxidant, antidiabetic, anticonvulsant, anti-cancer, antihyperlipidemic, antifungal, aaudio protective and aound healing properties^[407].

T. *Glycyrrhiza glabra* Linn.

Glycyrrhiza glabra Linn., also known as licorice and sweetwood is native to the Mediterranean region, central to southern Russia, and Asia Minor to Iran, now widely cultivated throughout Europe, the Middle East and Asia^[414]. It has oval leaflets, white to purplish flower clusters, and flat pods. Below ground, the licorice plant has an extensive root system with a main taproot and numerous runners^[415]. Thewater-soluble biologically active complexes in licorice constitutes triterpene saponins, flavonoids, polysaccharides, pectins, simple sugars, amino acids, mineral salts, and various other substances^[416]. The plant is reported to possess antiinflammatory^[408], antimicrobial and antiviral^[409], antioxidative^[410], hepatoprotective^[411], antitumor^[412] and immunomodulatory activities^[413].

Table 1: showing the ingredients of Ura-marunnu with botanical name

SI No:	Sanskrit name	Botanical name
1.	Avartaki	<i>Cassia auriculata</i> L.
2.	Bakuchi	<i>Psoralea corylifolia</i> Linn.
3.	Chandana	<i>Santalum album</i> Linn.
4.	Ela	<i>Elettaria cardamomum</i> Maton.
5.	Haridra	<i>Curcuma longa</i> Linn.
6.	Harithaki	<i>Terminalia chebula</i> Retz.
7.	Hingu	<i>Ferula asafoetida</i> L.
8.	Jatiphala	<i>Myristica fragrans</i> Houtt.
9.	Jyotishmati	<i>Celastrus paniculatus</i> Willd
10.	Kutaja	<i>Holarrhena antidysenterica</i> Linn.
11.	Lashuna	<i>Allium sativum</i> L.
12.	Maricha	<i>Piper nigrum</i> L.
13.	Mayaphala	<i>Quercus infectoria</i> Olivier
14.	Parnayavani	<i>Coleus aromaticus</i> Benth
15.	Pippali	<i>Piper longum</i> L.
16.	Rudraksha	<i>Elaeocarpus ganitrus</i> Roxb.
17.	Sunti	<i>Zingiber officinale</i> Roscoe
18.	Vacha	<i>Acorus calamus</i> Linn.
19.	Vidanga	<i>Embelia ribes</i> Burm
20.	Yastimadhu	<i>Glycyrrhiza glabra</i> Linn.

3. Discussion

The constituents of Ura-marunnu are predominantly pungent in taste, light in quality, pungent after digestion and hence alleviates the vitiation of kapha since the infancy period is dominant with Kapha dosha and hence produces the Kaphaja diseases. All these Kapahaja diseases are brought about due to the imbalance in the digestive fire. Balya (increases strength), Deepana (increases appetite), Pachana (kindles the digestive fire), Krimighna (anti-helminthic), Tridosahara (alleviates the three body humours), Grahi (absorbs the excess moisture), Krimihara (Anti-helminthic), Shoolahara (anti-spasmodic), Kushtaghna (anti-microbial), Vyadhikshamatvakaraka (increases immunity), Roghaghna (destroys diseases), Medhyam (increases intellect), Bhootagham (destroys evil spirits), Nidrakaraka (induces sleep) Ayushya (provides long life), Laghu (light), Srotoshodhana (clears the body channels), Rasyana (rejuvenative), Anulomana (mild laxative) Vyadhihara (disease curing) and Soolagham (removes pain). The Deepana, Pachana and laghu property help in correcting the deranged digestive fire and thereby pacifies the vitiated Kapha dosha.

4. Conclusion

Thus the recipe of Ura-marunnu can be practised as an effective baby care measure right from the birth of a child which kindles the digestive fire in child and thereby promoting the well-being. Still then, more detailed investigation of pharmacological activity, toxicity and Ura-marunnu. In future, the research scholars should be guided and entertained to investigate on various constituents of Ura-marunnu thereby exploring the maximum efficacy from this recipe.

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