



REVIEW ON NATURAL PAIN KILLER

DNYANESHWAR SHANKAARAO HENDRE

(RAJESH BHAIYA TOPE COLLEGE OF B PHARMACY SAMBHAJINAGAR)

AKASH RAJENDRA DHAVALANPURE

(RAJESH BHAIYA TOPE COLLEGE OF B PHARMACY SAMBHAJINAGAR)

ROHIT SHUBHASH SAWANT

(RAJESH BHAIYA TOPE COLLEGE OF B PHARMACY SAMBHAJINAGAR)

VISHAL GAHININATH

(RAJESH BHAIYA TOPE COLLEGE OF B PHARMACY SAMBHAJINAGAR)

SAYYAD SAJED SAYYAD JILANI

(RAJESH BHAIYA TOPE COLLEGE OF B PHARMACY SAMBHAJINAGAR)

Abstract

Over-the-counter and prescription drugs are recommended in neurosurgery practice. However long-term safety concerns should be considered when prescribing this drug for chronic and degenerative pain. This article reviews the literature review on the biochemical pathways of inflammation. The major side effects of NSAIDs and the most commonly used and evaluated. Anti-inflammatory drugs. While NSAIDs can be effective, herbal and nutritional supplements are safe and often more effective, especially for long-term use. Analgesics are pain medications that work in the absence of pain without conscious awareness. The word analgesic comes from the Greek words an- ("not") and algos ("pain"). Analgesics act on peripheral and obligate stress in many ways. Many artificial drugs - paracetamol, COX2 inhibitors, NSAIDs, ibuprofen, diclofenac, etc. There are many antibiotic tools, including. Medicinal plants, opioid analgesics, aloe vera, Andrographis paniculate, cardamom, pomegranate, pomegranate

Introduction

Pain, heat, redness, and swelling (pain, colour, rubor, swelling) are classic forms of the inflammatory process. Disorders of the spinal joints, associated muscles, tendons, ligaments, and bone structures can all cause pain and require neurosurgical consultation. Patients often do not require immediate surgical intervention and therefore require treatment to reduce pain and improve quality of life. Regardless of the ethology, the genesis of pain is often inflammation. With the role of inflammatory cytokines elucidated, there is now a clear understanding of how anti-inflammatory drugs can reduce inflammation and relieve pain.

The use of nonsteroidal anti-inflammatory drugs (NSAIDs) has become the main focus of classically trained physicians for joint and spine pain, the mechanism of which is mainly due to the interaction of NSAID and cytokine interleukin (IL).1a, IL-1b, IL-6, and tumour necrosis factor (TNF- α). An increase in the concentration of TNF- α leads to the development of the main symptoms of inflammation.

These prognostic cytokines are chemokines for neutrophils, helping them adhere to endothelial cells for migration. It also stimulates white cell phagocytosis and the production of inflammatory lipid prostaglandin E2 (PGE2). The ability of NSAIDs to inhibit prostaglandin production during the inflammatory cascade is the primary mechanism proposed for the anti-inflammatory success of these drugs.

TURMERIC

FAMILY: Zingiberaceae

SYNONYM: Curcuma, curcumin

BIOLOGICAL NAME: Curcuma longa.

BIOLOGICAL SOURCE:

- 1) The kitchen acts as a flavour enhancer. It is a common ingredient in corn, spinach, chickpeas, greens, and turmeric.
- 2) Haldighati' is believed to come from the yellow, turmeric-coloured soil of the area. (Turmeric Haldi in Hindi). Mountain crossing is important.

GEOGRAPHICAL SOURCE

- 1)Turmeric is widely cultivated on the mainland and in the islands of the Indian Ocean.
- 2)In the past it was used as a perfume. Rhizome has a peppery smell, a slightly bitter warm taste, and a strong orange-yellow colour.

MORPHOLOGICAL CHARACTER:

Turmeric is widely cultivated on the mainland and on islands in the Indian Ocean.

It was used in ancient times as a perfume and flavour and has a distinctive orange-yellow colour.



Figure 1 image by pixxel

Turmeric

CHEMICAL CONSTITUENTS

The distinctive yellow colour of turmeric comes from the pigment curcumin (CUR), 1,7-bis-(4-hydroxy-3-methoxyphenyl)-1,6-heptane-3,5-dione, and two curcuminoids, desmethoxycurcumin (DEM) and bisdemethoxycurcumin (BIS) (Fig. 1) These compounds are used in the food industry as a natural colorant.

REASON:

- 1) Turmeric is a staple ingredient in many Asian dishes, giving mustard-like ingredients an earthy, barely spicy taste.
- 2) In particular used in savoury dishes and some sweet dishes
- 4) Cakes In India, turmeric leaves, rice flour, and a mixture of coconut-onion leaves are located in the leaves, then sealed and saved in a special field used to make special chocolates, patoléo.
- three) most turmeric is used with root powder to provide it with a golden yellow colour.
- 5) It is used in many products including canned beverages, baked goods, dairy products, ice cream, yoghurt, yellow cakes, orange juice, biscuits, coloured popcorn, cereals, sauces, and gelatin. this is the main component of curry powder

CLOVES

SYNONYM: Caryophyllus aromatics

FAMILY: Myrtaceous BIOLOGICAL

BIOLOGICAL NAME: Syzygium aromaticum

BIOLOGICAL SOURCE: It consists of dried flowers of *Eugenia caryophyllus*

GEOGRAPHICAL SOURCE:

- 1) It comes from Amboyna and Maluku
- 2) Zanzibar is cultivated
- 3) Tamil NaKers and hilly regions of Karnataka and India

CHEMICAL CONSTITUENTS: Volatile oil (16-21%): - Phenol mainly eugenol (80-88), acetyl eugenol (10-15%); α and β
- Caryophyllene Tannin (10-13%) - Pyrogallol Tannin

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Figure 2 image by pixel

Clove

Other substances are methyl furfural and dimethyl furfural.

REASON:

- 1) Garlic is used in cooking
- 2) Asia, Africa, the Mediterranean,
- 3) Countries near the Middle East enjoy meat, onions, marinades, as well as fruits (such as apples, pears, and onions).
- 4) Turmeric can be used to give flavour and aroma to hot drinks, often combined with other ingredients such as lemon and sugar.
- 5) It's in a savoury mix, including pumpkin pie and spices.
- 6) Carminative spices
- 7) Carminative.
- 8) Flavouring agent.
- 9) Local anaesthetic (Eugenol).
- 10) Sweet smell
- 11) It is used in toothache, tooth preparation, and mouthwash
- 12) Oil in perfume

GINGER

SYNONYMS: Zinziber; Power

Family: Zingiberaceae.

BIOLOGICAL SOURCE: Zinger is made from the root of *Zingiber officinale*, Roscoe, which is dried in the sun.

GEOGRAPHICAL SOURCE:

Jamaica, South India (Cochin), Africa, Japan

Macroscopical characters:

- (i) General appearance: Sympodial branches, horizontal roots.
- (ii) Size - Length 5-15 cm; width (height) 3-6 cm; Thickness 0.5 - 1.5 cm
- (iii) Type - short curve, smooth at the top, flattened by branches or fingers. Each branch is 1 to 3 cm long and has a depression at the tip.

CHEMICAL CONSTITUENTS:

- 1) Contains 1-2% volatile oil, 5-8% crude oil, mass resin, and starch.
- 2) Volatile oil is responsible for the smell of stars.
- 3) zingiberene consists of 6% hydrocarbon sesquiterpenes zingiber sesquiterpene alcohol and besabol



Figure 3 image by pixel

Ginger

EASON:

1. Nourishes tissue and smell. It is used only as a perfume.
3. Ginger oil is used in mouthwashes, ginger ale, and drinks.
4. It is used as a dessert.
5. Ginger powder has been reported to be beneficial for ailments.

ROSEMARY

SYNONYM: Rosemarie oil

FAMILY: Liliaceae

BIOLOGICAL SOURCE:

Rosemary oil is distilled from the flowering plant from the leafy branches of *Rosmarinus officinalis*.

GEOGRAPHICAL SOURCE:

The plant is native to southern Europe and the oil is mainly produced in Spain and North Africa.



Figure 4 image by pixel

Rosemary

MORPHOLOGICAL CHARACTER

Rosemary is an evergreen shrub with hard, opposite, silent, persistent, linear, and coriaceous leaves about 3.5 cm and 2-4 mm wide.

Many branched trichomes make the lower leaf surface Gray and woolly; Normal labiate glandular hairs contain volatile oils.

Chemical constitution

- Fresh material produces 1-2% volatile oil with 0.8-6% ester and 8-20% alcohol.
- The main components are 1,8-cineole, borneol, camphor, boryl acetate and monoterpene hydrocarbons.
- Rosemary leaves contain alcohol triterpene α - and β -amyrins, rosmarinic acid, caffeic acid roficerone, chlorogenic acid and α -hydroxyhydrocaffeic acid.
- Luteolin and diosmetin glycoside, carnosolic acid, carnosol, rosmanol, epirosmanol and isorosmanol.

REASON:

- 1) The oil is mainly used in the perfume industry.
- 2) It is part of the soap line and is often used in aromatherapy. It is also used in indigestion, to strengthen urinary and digestive functions, and as a choleric or cholagogue. It is mainly used to clear nasal passages, colds, mouthwash, and rheumatic diseases. Rosemary extract is used as an antioxidant and preservative in food technology.
- 3) Cytosolic acid isolated from *R. officinalis* shows potent inhibition of HIV-1 protease activity.
- 4) It exhibits cytotoxicity at antiviral effective doses.

PEPPERMINT OIL

SYNONYM: Brandy MIT

FAMILY: Labiatae

BIOLOGICAL SOURCE: Mentha peppermint

GEOGRAPHICAL SOURCE:

It is mainly found in humid areas of Europe, the USA, and Great Britain.

MORPHOLOGICAL CHARACTER:

- 2 to 4 feet tall, with short, finely toothed edges, upper and lower surfaces, and often purple in colour.
- The flowers are red-purple, borne on the axils of high and flat leaves, open panicles.
- The plant has a unique smell and when applied to the tongue, it first has a warm, pleasant taste, followed by a cooling sensation due to menthol in the mouth.
- A colourless, yellow, or green liquid with a pungent, burning, camphor odour.
- It becomes thick and red when stored, but it softens after 14 years of storage.

Chemical constitution:

The main component of peppermint oil is Menthol, and other constituents such as methyl acetate, isovalerate, menthone, cineol, inactive pinene, limonene, and other minor compounds. Menthol decomposes on cooling at low temperature (-22 °C). Characteristics of plant taste related to the ester and alcohol components; the medicinal value is due to the alcohol component alone. British oil contains 60-70% Menthol, Japanese oil 85%, and American only 50%.



Figure 5 image by pixel

Peppermint oil

EASON:

It is stimulant, stomachic, carminative, expectorant and colic; in some dyspepsia, sudden pain, dysentery, cholera and diarrhoea. Since peppermint oil is gentle on babies, it relieves colic and nausea. Peppermint helps increase internal heat and skin. It is also used in hysteria and nervous disorders.

CAPSAICIN

SYNONYM: Cayenne pepper

FAMILY: Solanaceae

BIOLOGICAL SOURCE

Capsicum consists of dry, ripe fruits of *Capsicum minimal* and *Capsicum annum* Linn.

GEOGRAPHICAL SOURCE:

Capsicum is native to America and is cultivated in the tropical regions of India, Japan, Southern Europe, Mexico, Africa (Kenya, Tanzania, and Sierra Leone), and Sri Lanka.

MORPHOLOGICAL CHARACTER

Length 5–12 cm, width 2–4 cm, oblong, ovoid or oblong, pericarp compressed, orange or red, pedicel prominent and curved. Calibrated gear. The number of calyces and pedicels should not exceed 3%. The fruit is divided into two parts by separating the seed membrane inside. The seeds are uniform, smooth, 3-4 mm long, and covered with fatty endosperm. Capsicum has a unique aroma and a pleasant taste.

CHEMICAL CONSTITUENTS:

- Capsicum contains constant oil (four–sixteen%), oleoresin, carotenoids, capsaicin, capsicum (risky alkaloid), thiamine, volatile oil (1. five%), and ascorbic acid (0.2%). the root incorporates capsaicin (decyl vanillyl amide) (approximately zero.5%).
- Capsaicin retains its feature swelling whilst dissolved in 1 part in 10 million of water. Capsanthin is the primary carotenoid in purple berries.
- Along with cryptocapsin, it also occurs in the form of monoesters and esters.
- Different carotenoids consist of zeaxanthin. capsorubin, rubixanthin, phytofluene, capsanthin-5,6-epoxide, capsanthin-three,6-epoxide, lutein, cryptoxanthin, α - and β -carotene, capsorubin and some xanthophylls. Carbohydrates said in Chile consist of fructose, galactose, sucrose, and so on.
- Carries a trace amount of tocopherol (diet E) (~ 2. four mg / one hundred g).



Figure 6 image by pixel

Capsicum

reason:

- 1) Capsicum is used as a stimulant, irritant, and demulcent in sore throat, scarlet fever, whooping cough, and yellow fever; It is used internally as a carminative, laxative, dyspeptic, and laxative.
- 2) It is used in the form of an ointment, plaster, and medicine wool to relieve rheumatism and lumbago.
- 3) Capsaicin is used in the treatment of migraine and cluster headaches and neurogenic bladder.

FEWERFEW

SYNONYM: Altamisa Chrysanthème Matricaire

FAMILY: Asteraceae

BIOLOGICAL SOURCE:

1. Feverfew (*Tanacetum parthenium*) comes from Asia Minor and the Balkans.
2. Dry leaves, powdered leaves, and extracts are used in natural treatment. Fenugreek leaves contain many chemicals called parthenolide.

GEOGRAPHICAL SOURCE:

Originally from the Balkan Peninsula, this fever has now been found in Australia, Europe, China, Japan, and North Africa.

MORPHOLOGICAL CHARACTER

This annual plant grows 24" wide and 18" tall. The leaves are brown, fibrous, and have an orange scent.

Chemical constitution

- Plants have many natural products,

- Active principles include sesquiterpene lactones, perhaps parthenolide.
- Potential active ingredients including flavonoid glycosides and pinenes.

Reason:

1. Migraine.
2. Oral ingestion, alone or with other substances, with fever;
3. Can reduce the frequency and duration of migraine headaches.
4. It can also reduce pain, nausea, vomiting,
5. Sensitivity to light and sound.



Figure 7 image by pixel

Feverfew

Conclusion

The human body's natural reaction to injury causes inflammation, swelling, and erythema, which in turn causes swelling. Anti-inflammatory drugs such as NSAIDs act on many inflammatory pathways to reduce pain, and although they are often very effective, they can cause unwanted side effects such as stomach ulcers and, in rare cases, myocardial infarction and stroke. For centuries, natural anti-inflammatory compounds have been used to mediate the inflammatory process, often with minimal side effects. We have briefly reviewed the most commonly used natural compounds from plants and animals, both of which can have similar effects in treating inflammatory reactions.

Chronic and subacute syndromes encountered in routine neurosurgical practice. Trials and ongoing clinical trials should continue to guide and provides scientifically proven effectiveness to reduce obesity and promote health This chapter summarizes relevant information and literature on herbal analgesics and its chemical structure was investigated. In addition, unexplored medicinal plants have been reported It is specifically indicated that it should be used in folk medicine. This chapter also discusses research on analgesic drugs. In addition, this chapter explains the main thing ACER Poisoning by natural products shows analgesic properties.

References

- . Acebo E, Raton JA, Sautua S, Eizaguirre X, Trébol I, Pérez JL. Allergic contact dermatitis from *Boswellia serrata* extract in a naturopathic cream. *Am J Contact Dermat* 2004;51:91-2.
- Aguilar JL, Rojas P, Marcelo A, Plaza A, Bauer R, Reininger E, et al. Anti-inflammatory activity of two different extracts of *Uncaria tomentosa* (Rubiaceae). *J Ethnopharmacol* 2002;81:271-6.
- Almekinders LC, Gilbert JA. Healing of experimental muscle strains and the effects of nonsteroidal anti-inflammatory medication. *Am J Sports Med* 1986;14:303-8.
- Almekinders LC. Anti-inflammatory treatment of muscular injuries in sport. An update of recent studies. *Sports Med* 1999;28:383-8.
- Andersohn F, Suissa S, Garbe E. Use of first- and second-generation cyclooxygenase-2-selective nonsteroidal antiinflammatory drugs and risk of acute myocardial infarction. *Circulation* 2006;113:1950-7.
- Boswellia serrata*. *Altern Med Rev* 1998;3:306-7.
- Araujo CC, Leon LL. Biological activities of *Curcuma longa* L. *Mem Inst Oswaldo Cruz* 2001;96:723-8
- Badria FA, El-Farahaty T, Shabana AA, Hawas SA, El-Batoty MF. *Boswellia*- curcumin preparation for treating knee osteoarthritis: A clinical evaluation. *Alt Complement Ther* 2002;8:341-8.
- Banerjee M, Tripathi LM, Srivastava VM, Puri A, Shukla R. Modulation of inflammatory mediators by ibuprofen and curcumin treatment during chronic inflammation in rat. *Immunopharmacol Immunotoxicol* 2003;25:213-24.
- Banno N, Akihisa T, Yasukawa K, Tokuda H, Tabata K, Nakamura Y, et al. Anti-inflammatory activities of the triterpene acids from the resin of *Boswellia carteri*. *J Ethnopharmacol* 2006;107:249-53.
- Bengmark S. Curcumin, an atoxic antioxidant and natural NFκ B, cyclooxygenase-2, lipooxygenase, and inducible nitric oxide synthase inhibitor: A shield against acute and chronic diseases. *JPEN J Parenter Enteral Nutr* 2006;30:45-51.
- Bernstein JE, Bickers DR, Dahl MV, Roshal JY. Treatment of chronic postherpetic neuralgia with topical capsaicin. A preliminary study. *J Am Acad Dermatol* 1987;17:93-8.

