OSTEO-ARTHRITIS
HOMEOEPATHIC APPROACH AND A CONTROL STUDY

Introduction:

Arthritis is a global form to describe the numerous diseases of musculoskeletal system. In all these diseases musculoskeletal pain and stiffness are prominent features. These diseases affect the people of all age and ethnic groups. The incidence of disease increases with age.

40% of population over the age of 65 years in U.K. have some kind of arthritis. 20 million people are affected each year in Britain. Arthritis accounts for 20-25% of all consultations in general practice. In Europe arthritic diseases are the commonest cause for physical impairment. No other group of diseases is responsible for as great loss of earning as in arthritis.

Joint inflammation is the body's reaction to a mechanical injury to a joint (including fracture); the presence of an infection (usually caused by bacteria or viruses); or accumulated ‘wear and tear’ on joints. Most of the time, the inflammation goes away after the injury has healed or the infection has been cleared by the immune system, sometimes with help by antibiotics.

With some injuries and diseases, the inflammation does not go away. This is considered arthritis. There are more than 100 kinds of arthritis, with many different possible causes. Important of them are as follows:

I. INFLAMMATORY JOINT DISEASES
   (a) Rheumatoid arthritis.
   (b) Ankylosing spondilitis.
   (c) Reiter’s disease.
   (d) Psoriatic arthritis
   (e) Enteropathic arthropathy
   (f) Juvenile chronic arthritis.
   (g) Behoel’s syndrome.
   (h) Whipple’s disease.

II. DUE TO INFECTIONS
   (a) Bacterial
   (b) Fungal.
   (c) Viral.

III. CONNECTIVE DISEASES
   (a) Systemic lupus erythematosus.
   (b) Mixed connective tissue diseases.
   (c) Progressive systemic sclerosis.
   (d) Polyarthritis.
   (e) Polyarteritis nodosa.
Osteoarthritis is most common among all arthritis therefore let us confirm it in details.

Osteoarthritis

Osteoarthritis is the most common joint disease of human beings. It is also a most leading cause of disability among elderly population. Sometimes it is called degenerative joint disease or osteoarthrosis.

In young age joint distribution of osteoarthritis in male and female is similar but in old age osteoarthritis of hip is common in males and osteoarthritis of interphalangeal joints and base of thumb is common in females. Osteoarthritis of knee is also more common in females than males.

Radiological and autopsy surveys have shown a steady rise in degenerative changes of joints from the age of thirty. By the age of 65 years 80% of population have some evidence of osteoarthritis changes. Females are more affected than males.

The reported prevalence of osteoarthritis in India is 5.78% accounting for 30% of rheumatological problems. Indians are found to have increased knee osteoarthritis as compared to western people, while hip OA is distinctly rare in India. This increased knee OA in Indians could be related to excessive squatting for day activities especially amongst females.

Racial differences also exists both in prevalence of disease as well as in pattern of joint distribution, as osteoarthritis is more frequently found in native Americans than in whites.

Relation of heredity is less ambiguous in osteoarthritis. Mother and sister of women having osteoarthritis are respectively twice and thrice as likely to exhibit osteoarthritis as the mother and sister of unaffected women.

Age is the most important risk factor for developing osteoarthritis in a radiographic survey it has been found that

- In women less than 45 years only 2% were found to be having osteoarthritis.
- In women between 45 to 64 years 30% were found to be suffering from osteoarthritis
- In women above years prevalence of osteoarthritis was found 68%.

Major trauma and repetitive overuse of a joint are also important risk factors in developing osteoarthritis. Joint involvement also depends on workload, as osteoarthritis of ankle is more common in dancers and osteoarthritis of elbow is more common in baseball players.

Obesity has also found to be playing an important role in development of osteoarthritis.

An other very interesting fact is that there is a poor co-relation between pathological changes and severity of symptoms, as many individuals having advanced radiographic changes of osteoarthritis have no symptoms.
Osteoarthritis is characterized by degeneration of articular cartilage and simultaneously proliferation of new bone, cartilage and connective tissue. Osteoarthritis is a joint disease that mostly affects the cartilage. Cartilage is the slippery tissue that covers the ends of bones in a joint. Healthy cartilage allows bones to glide over one another. It also absorbs energy from the shock. In osteoarthritis, the surface layer cartilage breaks down and wears away. This allows bones under the cartilage to rub together, causing pain, swelling and loss of motion of the joint. Over time, the joint may lose its normal shape. Also, bone spurs – small growths called osteoarthritis may grow on the edges of the joint. Bits of bone or cartilage can break off and float inside the joint space. This causes more pain and damage.

People with osteoarthritis usually have joint pain and limited movement. Unlike some other forms of arthritis, osteoarthritis only affects joints, and not internal organs. For example, rheumatoid arthritis – the second most common form of arthritis – affects other parts of the body besides the joints. It begins earlier than osteoarthritis, causes inflammation, and may make people feel sick, tired and sometimes feverish.

Radiological and autopsy surveys have shown a steady rise in degenerative changes of joints from the age of thirty. By the age of 65 years 80% of population have some evidence of osteoarthritic changes. Females are more affected than males.

Basically the disease can be classified into secondary osteoarthritis and primary osteoarthritis or idiopathic osteoarthritis. In secondary osteoarthritis degenerative joint changes occur in a response to a recognisable local or systemic factor like obesity, trauma, hyper mobility, some metabolic cause like haemochromatosis, calcium deposition, bone and joint diseases like paget’s disease and osteoarthritis, neuropathic like charcot joints, haemoglobinopathies and due to congenital or developmental causes.

Primary or idiopathic osteoarthritis is a condition in which etiology is unknown and no predisposing factor is apparent and it is the most common form of the disease. Idiopathic osteoarthritis can be further divided in to localized and generalised osteoarthritis. In localized osteoarthritis disease remains localized to single sites like hands, feet, knee, hip, spine and other parts. In generalized osteoarthritis three or more sites are affected simultaneously.

In osteoarthritis commonly involved joints are knee, hip, spine and hand. Usually disease is confined to one or a few joints. Symptoms are in gradual in onset and starts from aching and pain provoked by use of joint and progresses to cause restricted movement of joint. Crepitus may be heard. Associated muscle atrophy is an important factor.

Diagnosis of osteoarthritis is based on clinical and radiographic features. Radiograph shows loss of joint space in early stage of disease, formation of marginal osteophytes, subschondral bone sclerosis bone remodelling and cyst formation are seen in more advanced cases.

**LITERATURE REVIEW**

**Aconite napellus**

- Acute, sudden, violent attack with fever.
- Inflammation of joints < night
- Red shining swelling, sensitive does not want to be touched
- Skin over the part red, hot, swollen, dry, burning.
- Agg: evening & night, warm room, dry, cold winds & lying on affected side.
- Amel: open air.

**Physical**

- Intense thirst
- Bitter taste of everything except water

**Mental**
- Great fear
- Anxiety
- Restlessness

**Apis mellifica**
- Swelling of joints
  - Joints swollen, shiny, sensitive, stinging pain
  - Pain in back & limbs
  - Affection of right side more
  - Agg: afternoon, heat, touch, pressure & closed room.
  - Amel: open air, cold bathing & uncovering

**Physical general**
- Thirstless
- Craving for milk

**Mental general**
- Apathy, indifference
- Awkward, drop things readily
- Rheumatism beings low down and ascends upwards.
- Joints sensitive to touch.
- Great fear of being touched.
- Agg: least touch, motion & damp cold
- Amel: laying down.

**Arnica**

**Physical general**
- Longing for vinegar
- Distaste for meat and milk

**Mental general**
- Fear touch or approach of any one
- Unconscious, when spoken to answers correctly but relapses.
- Wants to be alone

**Belladonna**
- Joints swollen, red, shining with red streaks radiating.
- Tottering gait
- Shifting rheumatic pains
- Agg: touch, jar, noise, afternoon, lying down
- Amel: semi-erect

**Physical general**
- Loss of appetite
- Aversion to milk & meat
- Great thirst for cold water
- Dread of drinking

**Mental general**
- Acuteness of all senses
- Hallucination, sees monsters, hideous faces
- Delirium, frightful image, furious

**Bryonia**
- Joints swollen, red, hot with stitching & tearing pain.
- Agg: morning, least movement, pressure, warmth, hot weather, exertion & touch.
- Amel: lying on painful side, pressure, rest & cold things.

**Physical general**
- Thirst for large quantity
- Abnormal hunger, loss of taste.

**Mental general**
- Exceedingly irritable.
- Delirium wants to go home, talks of business.

**Calcarea carb.**
- Rheumatic pain after exposure to wet
- Sharp stitching, as if parts were sprained.
- Cold knees
- Swelling of joints, especially knee.
- Agg: mental or physical exertion, ascending, cold, during full moon & standing.
- Amel: dry climate or weather, lying on painful side.

**Physical general**
- Craving for indigestible things, eggs, salt, sweets
- Milk disagree
- Dislike fat
- Longing for cold drinks.

**Mental general**
- Apprehensive < evening
- Fears loss of reason, misfortune
- Forgetful, confused.
- Averse to work or exertion.
Causticum
- Stiffness in hollow of knee
- Cracking & tension in knee
- Tearing joints
- Restless legs at night
- Agg: dry cold winds, clear fine weather, cold air & motion or carriage.
- Amel: damp wet weather & warmth

Physical general
- Aversion to sweets

Mental general
- Sad, hopeless
- Intensely sympathetic

Colchicum
- Stiffness of joints
- Shifting rheumatism
- Parts are red, hot & swollen
- Feverishness
- Knees strike together, can hardly walk
- Agg: evening, night, sunset to sunrise, warm weather, motion.
- Amel: stooping.

Physical general
- Smell of food causes nausea even to fainting especially fish
- Profuse salivation
- Craving for various things but averse to them when smelling them
- Thirst for effervescent, alcoholic beverages.
- Burning or ley coldness in stomach & abdomen.

Rhus tox.
- Hot painful swelling of joints
- Tenderness about knee joints
- Agg: cold, wet rainy weather, night, rest
- Amel: motion, warmt, dry weather, walking, warm application, stretching out limbs

Physical general
- Want of appetite for any kind of food.
- Unquenchable thirst with dry tongue.

Mental general
- Extreme restlessness with continuous change of position
- Great apprehension at night, can not remain in bed.
Phytolacca
- Shooting pain in right shoulder with stiffness and inability to raise arm.
- Rheumatic pain < morning.
- Pain fly like electric shocks.
- Pain shooting, lancinating, shifting rapidly.
- Aching of heels > by elevating feet.
- Agg: sensitive to electric changes, effects of wetting, exposure to damp cold weather, night, motion, right side.
- Amel: warm dry weather, rest.

Mental general
- Indifferent to life
- Disregard of surrounding objects

Pulsatilla
- Pain in hip joints.
- Swelling of knee joints.
- Tearing, drawing pains
- Pain in heel
- Suffering worse from letting the affected limb hang down.
- Agg: evening, heat, lying on painless side, hanging down feet.
- Amel: open air, motion, cold application.

Physical general
- Aversion to fat food, warm food and drink
- Thirstlessness

Mental general
- Weeps easily
- Fears to be alone, dark, ghost
- Likes sympathy.
- Highly emotional

Kali bichrom
- Pain, swelling, stiffness and cracking of all joints
- Pain fly rapidly from one joint to another
- Soreness of heel while walking.
- Agg: cold, morning.
- Amel: heat.

Physical general
- Desire for bear and acids
- Can not digest meal
- Gastric symptoms are relieved after eating and rheumatic symptoms reappear.
**Lilium tig**
- Pain in back and spine
- Pain in right arm and hip
- Pain in ankle joint
- Agg: warm room
- Amel: fresh air

**Physical general**
- Longing for meat
- Thirsty

**Mental general**
- Tormented about her salvation
- Consolation aggravates
- Profound depression of spirits.
- Fears some organic and incurable disease.

**Actea spicata**
- Rheumatic pains in small joints wrist, fingers, ankles & toes.
- Tingling pain
- Swelling of joints from slight exertion
- Wrist swollen, red
- Agg: any motion & touch

**Apocyanum**
- Pain in toes
- Swelling of feet
- Everything tastes and smell like honey
- Profuse sweat.

**Amploopsis**
- Pain in elbow joints
- Soreness of limbs
- Chronic hoarseness
- Agg: 6 p.m.

**Aristolochia**
- Stitching pain in heels and various parts with stiffness
- Pain in tendo-achillis
- Itching and swelling around malleoli
- Flatulence of stomach and abdomen

**Benzoic acid**
- Joints crack on motion
- Pain in tendo-archillis
- Rheumatic gout
- Nodes very painful
- Gouty deposits
- Ganglion
- Swelling of the wrist
- Pain and swelling of wrist
- Agg: open air & uncovering

**Caulophyllum**
- Drawing erratic pain and stiffness in small joints, fingers, toes, ankles, etc.
- Aching in wrist
- Cutting pain on closing hands
- Erratic pain, changing place every few minutes.

**Chelidonium**
- Soreness of wrist
- Tearing in metacarpal bones
- Rheumatic pain in hip and thigh
- Intolerable pain in heels, as if pinched by too narrow shoe
- Agg: right side, motion, touch, change of weather, early morning
- Amel: pressure.

**Guiacum**
- Rheumatic pain in shoulders, arms and hands
- Gnawing pain
- Immovable stiffness
- Joints swollen, painful and intolerant of pressure
- Feeling of heat in the affected limbs
- Agg: motion, heat, cold wet weather, pressure & touch
- Amel: external pressure.

**Ledum pal.**
- Pain especially in small joints shooting upwards
- Joints swollen, hot, pale
- Cracking in joints
- Agg: night, heat of bed
- Amel: cold

**Lithium**
- Right sided complaints
- Rheumatic pain of small joints with paralysis and stiffness
- Pain in hollow of foot extending to knee
- Psoriatic arthritis
- Agg: morning and motion
- Amel: hot water

**Rhododendron**
- Rhematic tearing in all limbs especially right side
- Joints swollen
- Pain in shoulders, arms, wrists etc.
- Stiffness of neck
- Agg: before storm, night, towards morning & rest.
- Amel: warmth, after storm break

**Ruta graveolens**
- Pain and stiffness in wrist and hand
- Small of back and joint pain
- Contraction of fingers
- Aching pain in tendo-achillis
- Pain in bones of feet and ankle
- Agg: lying down, cold, wet weather

**Salicylicum**
- Knees swollen and painful
- Acute articular rheumatism
- Profuse sweat
- Shifting pain
- Agg: touch and motion

**Stellaria media**
- Rheumatic pain in different parts of the body
- Pain in shoulders and arms
- Rheumatic pain in calves of legs.
- Synovitis,
  - Agg: morning and warmth
  - Amel: evening, cold air and motion

**Piper methysticum**
- Pain in thumb joint
- Pain in right arm
- Hand feels paralysed
- Pain > diverting attention

**Gnaphalium**
- Rheumatic pain in ankle joints and legs
- Chronic muscular rheumatism of back and neck
- Pain in joints, as if they lacked oil
- Intense pain along the sciatic nerve
- Numbness alternates with pain.

**Kalmia**
- Deltoid rheumatism especially right
- Pain affect a large part of a limb or several joints and passes through quickly.
- Joints red, hot, swollen
- Gouty and rheumatic metastasis to heart
- Agg: motion and open air.

**Viola odorata**
- Rheumatism of the deltoid muscle
- Pressing pain in right carpal and metacarpal joints
- Agg: cool air.

**Formica rufa**
- Rheumatic pains
- Stiff and contracted joints
- Rheumatism comes on with suddenness and restlessness
- Sweat does not relieve
- Agg: Cold, cold washing, dampness & before a snow storm
- Amel: warmth, pressure and rubbing

**Urtica urens**
- Pain in ankles and wrists
- Rheumatism associated with urticarial like eruptions
- Agg: snow air, water, cool moist air and touch.

Valeriana
- Pain in heels when sitting
- Sciatica
- Pain worse when standing and letting foot rest on floor, when straightening out limbs
- Pain better when walking.

NOSODES

Adrenaline
- Slight rheumatic pain coming and going down leg.
- Rheumatic pain in left elbow and little filter on walking
- Numbness and tingling from below upwards

Physical general
- Ravenous hunger
- Sudden spluttering diarrhoea
- Great sleepiness and drowsiness.

Mental general
- Lack of interest in anything
- Nervous

Morgan gartner
- Rheumatism of right shoulder, rt. arm, rt. wrist, rt. deltoid muscle and elbow.
- Arthritis of knee joint
- Knee stiff and painful

Physical general
- Desires sweet, salt and hot food.
- Flatulence of abdomen
- Constipation
- Drowsy after food

Mental general
- Irritable
- Nervous
- Impatient

Sycotico co.
- Rheumatic pain in shoulder, arms, elbows and wrists
- Arthritis especially of middle finger
- Pain > dry day, hot water
- Rheumatism of knee
- Ankle swollen and stiff

**Physical general**
- Chilly patient
- Aversion eggs.
- Appetite diminished.
- Constipation / diarrhoea

**Mental general**
- Nervous, tense, cross, restless
- Fear of being alone

**Dysentery co.**
- Rheumatism of neck and shoulder
- Backache
- Pain in knee joint.
- Pain in ankle joint
- Spondylitis
- Osteoarthritis and periostitis of foot
- Osteoporosis

**Physical general**
- Desires sweet, salt, milk and fat.
- Stool watery
- Insomnia

**Mental general**
- Tense, nervous, full of fear
- Lack of confidence
- Claustrophobia

**Morgan (pure)**
- Pain in shoulder, arm, wrist and hand
- Fingers stiff in morning
- Finger joints swollen and painful
- Meta carpo – phalangeal joints swollen and painful, especially middle finger
- Rheumatism of thumb
- Fibrous rheumatism of hands
- Knee joints swollen and painful
- Soles of feet painful
- Arthritis of spine
- Arthritis of sacro-iliac joints
- Rheumatoid arthritis of wrist
- Periarthritis of knee
- Osteoarthritis of knee
- Osteoporosis

**Physical general**
- Desires fat, weets, eggs and water
- Constipated
- Insomnia
- Pain in joints aggravation beginning to move and heat.
- Amelioration motion

**Metal general**
- Tense, active
- Weepy / depressed
- Irritable

**Bacillus no.7**
- Spinal osteoarthritis
- Joints swollen and painful
- Osteoarthritis of knee
- Left hip fixed due to arthritis
- Rheumatism of wrist

**Physical general**
- Aversion to fat
- Flatulency of abdomen.
- Sleeplessness

**Metal general**
- Tense, tired

**Medorrhinum**
- Rheumatism at top of shoulder and arm
- Pain extends to fingers > motion
- Acute or chronic rheumatic pain
- Pain in sacrum, coccyx and back of hip
- Running around and down limbs
- Agg: during day and cold weather
- Amel: sea shore, damp weather

**Physical general**
- Appetite ravenous / absolute loss of appetite.
- Desire sweet, sour, salt and ice.

**Menal general**

- Forgetfulness
- Dullness of memory
- Fear he is going to die
- Always in hurry

***

**REPERTORIAL SECTION**

1. Extremities, stiffness, morning
2. Extremities, pain, motion on
3. Extremities, swelling, foot
4. Extremities, inflammation, joint, synovitis
5. Extremities, pain, night
6. Extremities, pain, sleep during
7. Extremities, pain, stitching
8. Extremities, pain, shooting
9. Extremities, pain, stitching, night
10. Extremities, pain, wet weather
11. Extremities, pain, change of weather
12. Extremities, cracking joint in, walking while
13. Extremities, swelling, joints, upper limb, nodular
14. Extremities, swelling, joints
15. Extremities, emaciation, affected parts
16. Extremities, pain, bone, night
17. Extremities, pain, appearing gradually
18. Extremities, pain, drawing, warmth of bed, agg
19. Extremities, pain, morning, stormy weather
20. Extremities, pain, sore, bruised
21. Extremities, pain, morning, bed in, walking on
22. Extremities, pain, jerking, externally affected parts
23. Extremities, sleeplessness
24. Extremities, disturbed

**Miasmatic cleavage on nosologocal features of osteoarthritis**

1. Stiffness of affected joints < morning - sycosis
2. Initially pain on movement - sycosis
3. Swelling of metatarsophalangeal joint - syphillis
4. Deformities of the affected joints in late stage - syphillis
5. Pain due to synovitis - syphillis & psuudo-psora
6. Heberdens nodes - syphillis
7. Bony enlargement - syphillis
8. Erosive osteoarthntis of hip joints - syphillis
9. Acute pain at night - syphillis
10. Subchondral bone sclerosis - syphillis
11. Subchondral bone hypertrophy - syphillis
12. Sleep disturbed due to pain - all miasms
13. Periarticular muscle atrophy - syphillis
14. Stitching, shooting like pain < night - syphillis
15. Pain < change of weather - syphillis
16. Pain < cold and damp weather - syphillis
17. Bony crepitation on movement - syphillis
18. Square appearance of the thumb bone - syphillis
19. Radicular pain due to nerve root compression - syphillis
20. Localised tenderness - psora

Miasm in General

Mental:

Psora: Quick, active, alert, restless, anxious, changeability and oversensitiveness.
Sycosis: Suspicious, cruel, introvert, criminal attitude.
Syphilis: Dull, stupid, fixed ideas, poor comprehension, forgetfullness, dread of being alone.

General Modalities:

Psora: Agg: cold in general, motion, exertion, winter.
Ame: warm, rest, open air, perspiration, sleep.
Sycosis: Agg: cold, change of weather, sunrise to sunset.
Ame: warm, slow motion, abnormal discharge, pressure.
Syphilis: Agg: warmth, night, natural discharge, sleep
Ame: cold in general, abnormal discharge, rapid motion, open air, day time.

Reaction to heat & cold:

Psora: Both hot and chilly, mainly chilly
Sycosis: Chilly.
Syphilis: Hot

Desire:
Psora: Good desire
Sycosis: Malicious desire.
Syphilis: Perverted desire.

**Aversion:**
Psora: Boiled food and drink, cold milk
Sycosis: Cold food and drink.
Syphilis: Animal food, meat (mainly)

**Intolerance:**
Psora: Easy dyspepsia from slight alternation of food.
Sycosis: Meat, bear, wine.
Syphilis: Meat, milk, hot food, drink.

**Sweat:**
Psora: Perspiration >
Sycosis: < natural discharge.
Syphilis: < perspiration

**Sleep:**
Psora: Unrefreshing
Sycosis: Rolling the head from side to side.

**Taste:**
Psora: Bitter
Sycosis: Foetid.
Syphilis: Metallic

**Stool:**
Psora: Mostly constipated
Sycosis: Spasmodic colic pain, mostly diarrhoeic.
Syphilis: Dysenteric stool

**Urine:**
Psora: Retention, sense of constriction, sense of burning
Sycosis: Painful, nocturnal.
Syphilis: Stricture urethra, frequent at night

**MANAGEMENT OF OSTEOARTHRITIS**

Most successful treatment programs involve a combination of treatment fitting to the patient’s needs, lifestyle and health. Osteoarthritis treatment has four general goals:

1. Control pain through drugs and other measures.
2. Improve joint care through rest and exercise.
4. Achieve a healthy lifestyle.

Osteoarthritis treatment plans often include ways to manage pain and improve function. Such plans can involve exercise, rest and joint care, pain relief, weight control medications, surgery and non-traditional treatment approaches.

**Exercise**

Research shows that one of the best treatments for Osteoarthritis is exercise. This activity can improve mood and outlook, decrease pain, increase flexibility, improve the heart and blood flow, maintain weight and promote general physical fitness. It is also inexpensive and if done correctly has few negative side effects. The amount and form of exercise will depend on which joints are involved, how stable the joints are and whether a joint replacement has already been done.

You can use exercises to keep strong and limber, extend your range of movement, and reduce weight. Ask your doctor or physical therapist what exercises are best for you.

- **Strength** - Exercise bands are inexpensive devices that add resistance.
- **Aerobics** - Activities that keep your lungs and circulation systems in shape.
- **Range of motion** – These activities keep the joints limber.
- **Agility** - Many of these exercises help you to maintain daily living skills.
- **Neck and back strength** – Do not forget to keep your spine strong and limber.

**Rest and Joint care** Treatment plans include regularly scheduled rest. Patients must learn to recognize the body’s signals, and know when to stop or slow down. This prevents pain caused by overexercising. Some patients find that relaxation techniques stress reduction and biofeedback help. Some use canes and Braces to protect joints and take pressure off them. Splints or braces provide extra support for weakened joints. They also keep the joint in proper position during sleep or activity. Splints must be used for limited periods because joints and muscles need to be exercised to prevent stiffness and weakness. An occupational therapist or a doctor can help the patient get a properly fitting splint.

**Pain relief** – People with Osteoarthritis may have nonmedical ways to relieve pain. Patients can use warm towels, hot packs, or a warm bath or shower to apply moist heat to the joint. This can relieve pain and stiffness. In some cases, cold packs (a bag of ice or frozen vegetables wrapped in a towel) can relieve pain or numb the sore area. (Check with a doctor or physical therapist to find out if heat or cold is the best treatment.) Water therapy in a heated pool or whirlpool may also relieve pain and stiffness. For Osteoarthritis in the knee, patients may wear insoles or cushioned shoes to redistribute weight and reduce joint stress.

**Weight control** - Osteoarthritis patients who are overweight or obese need to lose weight. Weight loss can reduce stress on weight-bearing joints and limit further injury. A dietician can help patients to develop healthy eating habits. A healthy diet and regular exercise help to reduce weight.

**Surgery** - For some people, surgery helps to relieve the pain and disability of osteoarthritis. Surgery may be performed to:

- Resurface (smooth out) bones.
- Reposition bones.
- Replace joints. Surgeons may replace affected joints with artificial joints called prostheses. These joints can be made from metal alloys, high-density plastic, and ceramic material, and can be joined to bone surfaces by special cements. Artificial joints can last from 10 to 15 years or more. About 10% may need revision. Surgeons choose the design and components
of prostheses according to their patient’s weight, sex, age, activity level and other medical conditions.

- Remove loose pieces of bone or cartilage from the joint to improve joint function. The decision to use surgery depends on several things. Both surgeon and patient consider the patients level of disability, intensity of pain and interference with lifestyle, age, and occupation. Currently, more than 80% of osteoarthritis surgery cases involve replacing the hip or knee joint. After surgery and rehabilitation, the patient usually feels less pain and swelling, and can move more easily.

**Complementary approaches** – Among the alternative therapies for treating osteoarthritis are:

- **Acupuncture**: Some people have found pain relief using acupuncture (the use of fine needles inserted at specific points on the skin). Preliminary research shows that acupuncture may be a useful component in an osteoarthritis treatment plan for some patients.

- **Folk remedies**: Some patients seek alternative therapies for their pain and disability. Some of these alternative therapies have included wearing copper bracelets, drinking herbal teas and taking mud baths. While these practices are not harmful, some can be expensive. They also cause delays in seeking medical treatment. To date, no scientific research shows these approaches to be helpful in treating osteoarthritis.

- **Electromagnetic pulsating therapy**: It relieves pain, swelling and stiffness.

**CONTROLLED STUDY**

From above it is envisaged, the magnitude of the problem is very great and Homoeopathy has ample scope to play. Despite many types of therapeutic applications, the disease is posing problem. Experience of Homoeopathic physicians speak there is role of Homoeopathy in curing the condition.

A double blind control study was carried out at Dr. A.C. Homoeopathic Medical College & Hospital and authors clinic from 1995 to 2001 with following objectives. Cases were collected in a standardised case recording proforma.

**Aims / objectives**

1. To study the effects of Homoeopathic medicines over Osteoarthritis.
2. To identify most effective drugs.
3. To find out most reliable potency / potencies
4. To determine the repetition schedules
5. To ascertain the occurrence of disease in various age group and sex.

**Methodology**

The criteria for diagnosis of the disease were kept as follows:

**Clinical Features**

- Commonly involved joints are knee, hip, spine and hand
- Usually the disease remains confined to one or a few joints.
- Gradual onset.
- Aching pain provoked by use of joint
- Restricted movement of joint
- Stiffness on arising in morning and after a period of inactivity.

**Signs**

- Localised tenderness
- Bony or soft tissue swelling
- Crepitation
- Deformity
- Bone hypertrophy
- Muscle wasting
- Subluxation

**Radiological findings**

- Early stage
  - Loss of joint space
  - Formation of marginal osteophytes
- Advanced stage
  - Subschondral bone sclerosis
  - Bone remodelling
  - Cyst formation

For collection of data from age group followings types were made:

- Children - 2-12 yrs.
- Young age - 13-30 yrs.
- Middle age - 31-50 yrs
- Old age - 50 yrs and above

For collection of repetition schedule results following parameters were fixed:

1. **Single dose** – Indicated drug(s) prescribed in single dose and allowing patients to wait for sufficient period of time.
2. **Repeated dose** – Indicated drugs were administered daily.

For potencies some cases were prescribed with centesimal potency and some cases with fifty millesimal potency.

Parameters fixed to assess the improvement of the cases were as follows:

**Positive response:**

- **Marked** – Disappearance of all signs and symptoms and radiographic changes revert to normalcy and no reappearance of any relevant signs and symptoms for three years.
- **Moderate** - Maximum signs and symptoms of disease are relieved and radiographic changes are revert to normalcy.
- **Mild** – Disappearance of signs and symptoms but radiographic findings remain unchanged or no remarkable change.

**Negative response**

- **No improvement**: Patient does not stick to the treatment.
- **Dropped out**: No relief- either in subjective symptoms or objective symptoms.

**Results**

Patients were diagnosed as per the diagnostic features mentioned under the methodology and were prescribed remedies after proper Repertorisation.
The results were documented as per the parameters fixed which are delineated below:

Table-I (Results of drug response in osteoarthritis)

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of patients treated</th>
<th>Positive response</th>
<th>Total</th>
<th>Negetive response</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Marked</td>
<td>Moderate</td>
<td>Mild</td>
<td></td>
</tr>
<tr>
<td>Test group</td>
<td>105</td>
<td>22</td>
<td>29</td>
<td>37</td>
<td>88</td>
</tr>
<tr>
<td>Control group</td>
<td>30</td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

Table-II (Results of various scales in osteoarthritis)

<table>
<thead>
<tr>
<th>Types of scales</th>
<th>No. of cured cases</th>
<th>No. of cases not cured</th>
<th>Total no. of patients treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>50 millesimal scales</td>
<td>60</td>
<td>10</td>
<td>70</td>
</tr>
<tr>
<td>Centisemal scales</td>
<td>28</td>
<td>7</td>
<td>35</td>
</tr>
</tbody>
</table>
Table-III (Results of various repetition schedule in osteoarthritis)

<table>
<thead>
<tr>
<th>Types of repetition</th>
<th>No. of cured cases</th>
<th>No. of cases not cured</th>
<th>Total no. of patients treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single dose</td>
<td>64</td>
<td>6</td>
<td>70</td>
</tr>
<tr>
<td>Repeated dose</td>
<td>24</td>
<td>11</td>
<td>35</td>
</tr>
</tbody>
</table>
### Table-IV (Incidence of various age group in osteoarthritis)

<table>
<thead>
<tr>
<th>Different age group in years</th>
<th>No. of cases treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children (2-12 years)</td>
<td>0</td>
</tr>
<tr>
<td>Young (13-30 years)</td>
<td>0</td>
</tr>
<tr>
<td>Middle age (31-50 years)</td>
<td>7</td>
</tr>
<tr>
<td>Old age (51 &amp; above)</td>
<td>128</td>
</tr>
</tbody>
</table>

### Table-V (Incidence on male / female in osteoarthritis)

<table>
<thead>
<tr>
<th>Types</th>
<th>No. of cases treated</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>63</td>
</tr>
<tr>
<td>Female</td>
<td>72</td>
</tr>
</tbody>
</table>
Most frequently occurring effective drugs:

- Sycotic co. - 11
- Medorrhinum - 10
- Bryonia alb. - 8
- Rhus tox. - 8
- Arnica mont. - 7
- Rhododendron - 6
- Formica rufa - 6
- Others - 22

Discussion:

Homoeopathic medicaments not only remove symptoms but also pathological changes are shown in this study. The degenerative changes and proliferation in the form of osteophytes are also removed in the cases, which supplies defeating reply to the remark given in Hufeland's journals “Homoeopathy removes the symptoms but the disease remains as such”.

Results obtained from

- Drugs responses for osteoarthritis
- Various repetition schedule response for osteoarthritis
- Various potencies response for osteoarthritis.

Were processed for chi-square test by using (2x2) contingency table.

On referring to chi-square table with one degree of freedom the value of chi-square for probability of 0.05 is 3.841. The calculated values were as follows:

a. Drug response 42.37
b. Repetition schedule response 9.07
c. Potency response 0.56
In ‘a’ and ‘b’ the calculated values are higher than tabulated value. Hence we conclude that null hypothesis is rejected and result is significant that means Homoeopathic medicines do act positively in treatment of osteoarthritis and repeated drugs are better than single dose (it is because due to maximum no. of cases dealt with 50 millesimal potencies).

On potency response the calculated value is less than tabulated value. Hence we conclude that null hypothesis is accepted and the result is non-significant. There is no difference between 50 millesimal and centesimal potencies in the treatment of osteoarthritis.

Giving a cursory look to the occurrence of disease in various age groups, it is seen that disease is vary commonly occurring above the age of 50 yrs. This validates our all earlier observations made by various workers.

Similarly, the disease is more commonly seen in females than males perhaps due to over weight frequently using squatting position for various works.

**CONCLUSION**

From above study and exposition it is envisaged that,

2. Effect of 50 millesimal is not superior over centesimal scale for osteoarthrites cases.
3. Repeated doses act better over single dose (of course in majority of cases 50 millesimal were prescribed where principle is to repeat so long there is improvement) in osteoarthritis cases.
4. Incidence of osteoarthritis is more in aged people and females.

With above convincing result author is not complacent. He desires we should try to augment / foster the cure rate by increasing the citadel of homoeopathic medicament by proving new drugs to combat osteoarthritis and better diagnostic procedure to select the accurate drug in every case. Apart from this study can be undertaken along with other physical modalities and even with other alternative therapies to combat the disease.

Of course the task is very hard but we have to do it.

**BIBLIOGRAPHY**

1, 4, 20, 22, DAVIDSON’S Principles and Practice of Medicine, 18th edition page 864-865.

6, 7, 9, 10, 11, 12, 13, 18, 21, 22, HARRISON’S Principles of Internal Medicine, Vol-II 14th edition, Page 1935-1936.

2, 5, Facts sheet, American college of Rheumatology.

3, 14, 15, 16, Encyclopedia of Medicine, U.S. National Library of Medicine, up dated 2nd Jan, 2002.


25, O.A. Julian, Materia Medica of Nosodes with Repertory.
26, Allen, Materia Medical of Nosodes.