

AHAR AND VIHAR IN RAJONIVRUTI KAAL wrt OSTEOPOROSIS**Dr. Hemalata Jalgaonkar***

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Article Received on
30 January 2018,Revised on 20 Feb. 2018,
Accepted on 12 March 2018,

DOI: 10.20959/wjpr20187-11510

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College, Pune.**INTRODUCTION**

- Rajonivruti is very crucial phase of women life. Now a days due to changing lifestyle, dietary habits affect calcium, oestrogen metabolism which leads to early menopause and worsening of postmenopausal symptoms.
- Osteoporosis becomes a serious health treat for aging postmenopausal women by predisposing them to increased risk for fractures and result in mortality or morbidity among them due to impaired metabolism of oestrogen and calcium.
- Some factors like deficiency of sunlight, aging, decrease estrogen, decrease dietary intake of calcium and vit D3 will increased further

risks for osteoporosis.

- Menopausal transition is also hallmarked by increased bone loss causing osteoporosis demanding additional calcium and vit D3. many micronutrients and antioxidants are needed to counteract the free radicals injury associated with aging. Thus diet around perimenopause has vital effects on physical activity and health of women.

CONCEPT**MENOPAUSE**

- Cessation of menstruation at end of reproductive life due to loss of ovarian follicular activity around age of 45 to 50 yrs.

HARMONAL CHNGES

- Depilation of ovarian follicles
- Resistance to pituitary gonadal hormones
- Impaired folliculogenesis
- Low oestrogen production {serum level 50-300pg/ml to 10-20 pg/ml}
- No endometrial growth

- No menstruation.

SYMPTOMS

- Vasomotor symptoms
- Cardiovascular
- Locomotor
- Nervous system

BONE METABOLISM

- Bone formation; osteoblastic activity
- Bone reabsorption: osteoclastic activity
- Both activities are balanced by – endocrine.

Nutritive

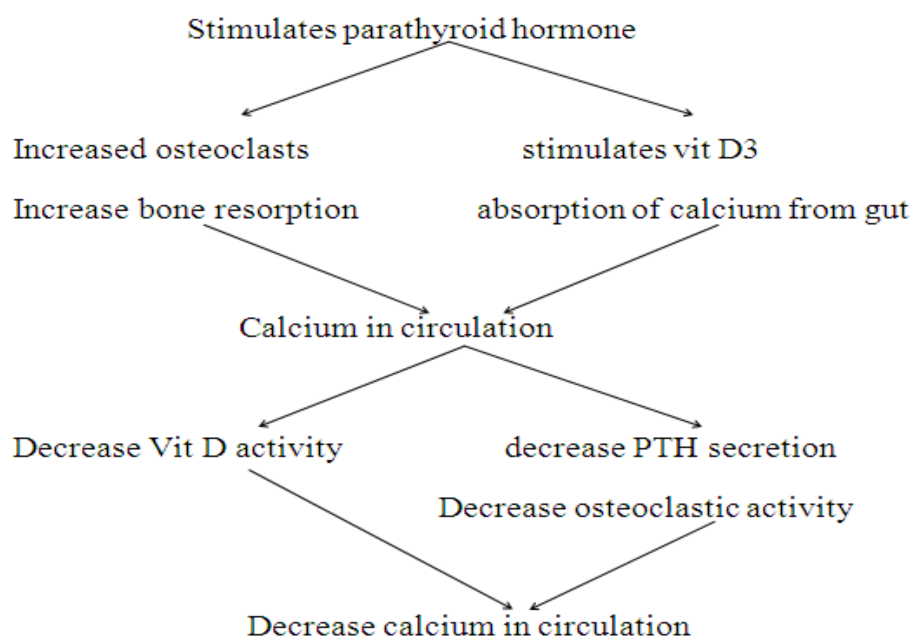
Genetic

OSTEOPOROSIS

- It is the condition where there is reduction in bone mass but bone mineral to matrix ratio remains normal.
- It predominantly presents with pain, stiffness, limitation of movements, crepitus, swelling.

PATHOPHYSIOLOGY OF OSTEOPOROSIS

1 AGING 2 DECREASED CALSIUM INTAKE 3 ESTROGEN DEFICIENCY



TYPE 1 OSTEOPOROSIS: it occurs in age 50-70 yrs due to decrease I estrogen level. It may involves tubular bones and causes wrist and vertebral fractures.

TYPE 2 OSTEOPOROSIS: it typically occurs after 70 yrs and tubular and cortical bones. It leads to hip and vertebral body fractures.

MENOPAUSAL EFFECTS ON BONE

- Decrease bone density
- Osteopenia
- Osteoporosis.

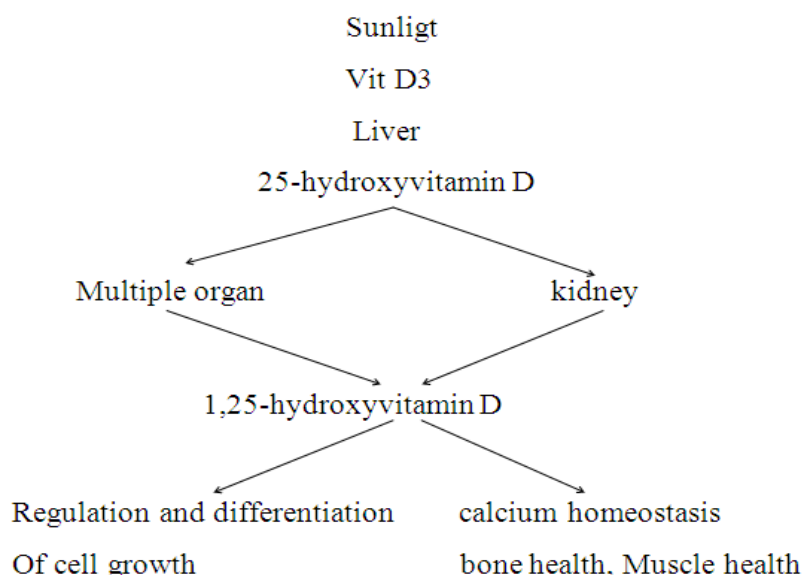
ESTROGEN EFFECTS ON BONE

- Absence of estrogen increases osteoclastic activity which leads to bone resorption.
- It increase the efficiency of calcium absorption:
 1. Estrogen induced availability of vit D.
 2. It increases receptors of vit D in osteoblasts cells.
 3. Estrogen depended growth factors increases bone remodeling.

It increases calcium absorption and allows the utilization of calcium supplements without side effects.

VIT D EFFECTS ON BONE

Age related decrease in ability of tissue to convert 1. Vit D 2. 25-hydroxyvitamin D to active form 1,25-dihydroxyvitamin D which results in decrease ability of intestine to absorb dietary vit D.



AYURVED CONCEPT

तद् वर्षात् द्वादशात् काले वर्तमान असक पुनः ।

जरापक्व शरीराणां याति पंचाशत क्षयं ॥

सु.शा.३/११

According to sushrut menarch age is 12 yrs, but after old age around 50 yr there is cessation of menstruation called rajonivrutti.

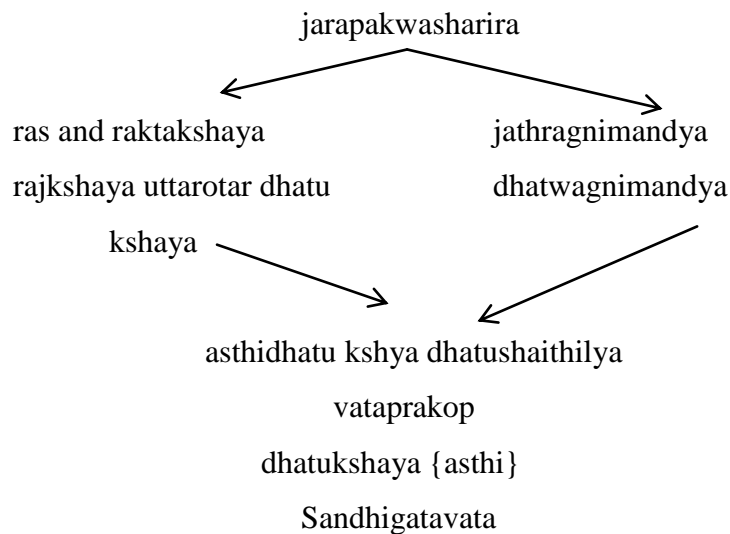
SANDHIGAT VATA

It is degenerative arthritis of joints mainly seen during old age. Commonly seen at hip, knee, some joints of spine.

It is the invasion and localization of morbid vata in all joints of body there by producing pain, swelling, disturbed movement, vatpurnadrutisparsh.

देहेस्रोतांसिरिक्तानिपुरयित्वाअनिलबलि ।

करोतिविविधानिव्याधीनसर्वागएकांगसंश्रिता ॥ च. चि. २८/१८

RAJONIVRUTI AND SANDHIGATVATA

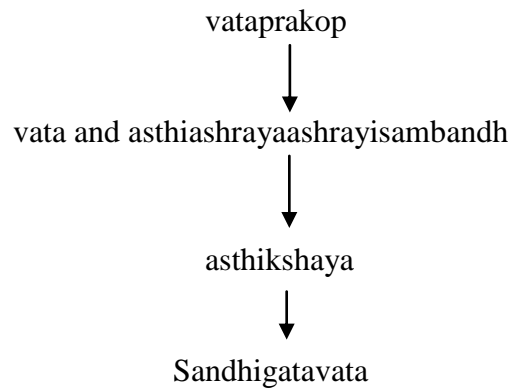
ASTHI AND VATA SAMBANDHA

तत्रास्थनिस्थितोवायुः पित्तं तु स्वेदरक्तयोः ।

श्लेष्माशेषेषु तेन एषु आश्रयाश्रयिणांमिथः ॥२७॥

यदेकस्यतदन्यस्यवर्धन क्षपणे औषधम् ।

अस्थिमारुतयो न एव प्रायो वृद्धिः तर्पणात् ॥२८॥ अ.ह.सु.११



AAHAR AND VIHAR IN POSTMENOPAUSE CONDITION

Essential nutrients

CALCIUM: Milk, yogurt, cheese, sardines or small fish with bones, vegetable such as broccoli, as well as nuts and seeds.

Vit D: Oils, fish, lentils, eggs and brown rice,

PHOSPHORUS: Peanuts, meat, cheese, onions, garlic.

IRON: Meat and fish sources: Beef, pork, lamb, eggs and seafood. Green leafy vegetables, spinach, asparagus, broccoli, collard greens, mustard greens, kale, parsley, cabbage, dried beans and certain fortified foods - cereals, oatmeal. Dried fruits-apricots, raisins, dates-prunes, figs.

MAGNESIUM: Halibut, nuts, cereals, grains, seeds and vegetables (especially green leafy ones).

ZINC: Shellfish, liver, oxtail and corned beef, chickpeas, pumpkin seeds, nuts, wholegrains and cheese.

SELENIUM: Brazil nuts, wheat germ, kidney and liver, oily fish including tuna, sunflower seeds, lentils, cashew nuts.

COPPER: Liver, sesame seeds, raw cashews, soybeans, barley, raw sunflower seeds.

IODINE: Sea food, vegetables grown on iodine rich soil, iodine fortified food.

Vitamin A: Liver (beef, pork, chicken, turkey, fish), carrots, broccoli - especially in the leaves, sweet potatoes, kale, butter, spinach and leafy vegetables and pumpkin.

VITAMIN C: Rose hips, oranges, kiwi, lemon, berries -like blackberries, blueberries, strawberries, peppers, sprouts, kale and spring greens.

VITAMIN E: Avocado, nuts such as almonds or hazelnuts and seeds. Spinach and other green leafy vegetables. Vegetable oils like sunflower and olive oil. Wheat germ, whole grain foods, milk and asparagus).

PANTOTHENIC ACID: Whole-grain cereals, legumes, eggs, meat, and royal jelly.

VITAMIN B1: Oatmeal, flax, brown rice whole grain flour (rye or wheat), asparagus kale, cauliflower, potatoes, oranges, pork liver (beef or pork), eggs.

VITAMIN B6: Meats, whole grain products, vegetables and nuts.

VITAMIN B12: Meat, dairy products and eggs and vitamin 812 fortified food.

NIACIN: Meat, wheat germ, dairy products and yeast.

FOLATE: Leafy vegetables such as spinach, turnip greens, lettuces, dried beans and peas, fortified cereal products, sunflower seeds.

SPECIAL NUTRIENTS

Phytoestrogens: Phytoestrogens are natural source of plant derived estrogens.

1. They reduce LDL cholesterol, total cholesterol, increase HDL cholesterol, thus improving lipid profile and protect against cardiovascular diseases.
2. They have protective action on bones preventing bone loss.
3. They prevent certain breast cancers.
4. They relieve menopausal symptoms like hot flushes.

Soy is a rich source of phytoestrogens called Isoflavones which are of two types, Genestein and Daidzein. Phytoestrogens are a preferred choice because:

1. They are natural alternatives to hormones.
2. Whatever small amount of estrogen is obtained in menopause, is sufficient to alleviate menopausal symptoms.
3. In premenopausal women, it interferes with natural estrogen and cautions approach should be applied in using during postmenopause.
4. New research indicates that phytoestrogens also act as antioxidant thereby preventing free radical injury causing aging.
5. Its effect is doubtful in osteoporosis, Alzheimer's disease and brain function.

Sources: Soy and soy products, lentils, kidney beans, lima bean, Tofu, It is a good habit to incorporate phytoestrogens upto 30 50 mg/day In our diet gradually.

VIHAR

TYPES OF EXERCISES RECOMMENDED IN MENOPAUSE

1. Aerobic conditioning for heart health and calorie-burning (walking, cycling, swimming, aerobics).
2. Strength training for muscles, bones and metabolism (dumbbells, weight machines, exercise bands).
3. Stretching for flexibility (stretching, yoga, Pilates, etc.).
4. Recreational activities such as tennis, dance, martial arts, etc. can provide additional muscle and bone-building benefits and increase fun factor.

Yogasanas Useful in Menopause

- Utthitvivekasan
- Samcharan-ardha-halasan+ ashiwini mudra
- Shashankasan
- Shavasan
- Viparitkarni
- Tadaasan, padsanchalan, sandhisanchalan
- Bramhamudra, uttanpadasan
- Bhujangasan, naukasan, shalbhasa
- Kapalbhati shudhikriya
- Nadishodhan pranayam
- Shitali pranayam.

These asanas should be performed daily. In order to get full asana, each asana should be done with full involvement of mind can be increased gradually. Asana is not an exercise, nor it is a replacement for exercise.

BIBLIOGRAPHY

1. Vd. Yadavaji Trikamji Acharya and Narayan Ram Acharya, Sushrut Samhita, Chaukhamba Oreintalia Varanasi, 4 th edition 1980.
2. Vd. Yadavaji Trikamji Acharya, charak Samhita by Agnivesha revised by Charak and Drudhabala, Chaukhamba Sanskrit sansthan, Varanasi, 1941 edition, 1984 Reprint

Charak, Charak Samhita, Varanasi, Ed.Dr. Brahmananad Tripathi, Chaukhamba Surbharati Prakashan- 2002.

3. Prof.Priyvat Sharma, Ashtang Hridayam, Chaukhamba orientalia Varanasi, First edition 1978.
4. Practical approach to menopause management – Ruuta Fuke.