Osteo-D®
Cholecalciferol 20000 IU & 40000 IU

Presentation
Osteo-D® 20000 IU soft gelatin capsule: Each soft gelatin capsule contains Cholecalciferol BP (as Vitamin D₃) 20000 IU.
Osteo-D® 40000 IU soft gelatin capsule: Each soft gelatin capsule contains Cholecalciferol BP (as Vitamin D₃) 40000 IU.

Description
Vitamin D is essential for normal bone growth and development and to maintain bone density. It is also necessary for utilization of both Calcium and Phosphorus. Vitamin D acts as a hormone and increases reabsorption of Calcium and Phosphorus by the kidneys and increased bone turnover.

Indication
Prevention and treatment of Cholecalciferol (Vitamin D₃) deficiency states.

Dosage and administration
Adults:
- Treatment of Vitamin D deficiency: 40000 IU/week for 7 weeks, followed by maintenance therapy 1000 IU/day.
- Prevention of vitamin D deficiency: 20000 IU/month.

Children:
- Treatment of Vitamin D deficiency, 12-18 years: 20000 IU, once every 2 weeks for 6 weeks.
- Prevention of Vitamin D deficiency, 12-18 years: 20000 IU, once every 6 weeks.

Side-effects
Generally all nutritional supplements are considered to be safe and well tolerable. However, few side-effects can generally occur including hypercalcaemia syndrome or Calcium intoxication (depending on the severity and duration of hypercalcaemia), occasional acute symptoms include anorexia, headache, nausea, vomiting, abdominal pain or stomach ache and constipation with the administration of Cholecalciferol.

Precautions
People with the following conditions should exercise caution when considering taking vitamin D supplements:
- High blood Calcium or Phosphorus level
- Heart problems
- Kidney disease

Vitamin D must be taken with adequate amounts of both Calcium and Magnesium supplementation. When Calcium level is low (due to insufficient vitamin D and calcium intake), the body activates the parathyroid gland, which produces PTH (parathyroid hormone). This hormone kick starts vitamin D hormone production and assists removal of Calcium from the bones to be used in more important functions such as neutralizing body acidity.

Contraindications
Cholecalciferol is contraindicated in all diseases associated with hypercalcaemia. It is also contraindicated in patients with known hypercalciuria, hypercalciuria or patients taking calcium supplements. Cholecalciferol is contraindicated in patients with known hypercalciuria, hypercalciuria or patients taking calcium supplements.

There is no evidence to suggest that vitamin D is teratogenic in humans even at very high doses. Cholecalciferol should be used during pregnancy only if the benefits outweigh the potential risk to the fetus. It should be assumed that excessive Cholecalciferol passes into the breast milk. In view of the potential for hypercalcaemia in the mother and adverse reactions from Cholecalciferol in nursing infants, mothers may breastfeed while taking Cholecalciferol, provided that the serum Calcium levels of the mother and infant are monitored.

Drug interactions
Since Cholecalciferol is one of the most important active metabolites of vitamin D, pharmacological doses of vitamin D and its derivatives should be withheld during treatment with Cholecalciferol to avoid possible additive effects and hypercalcaemia. Dietary instructions, especially concerning Calcium supplements, should be strictly observed and uncontrolled intake of additional Calcium-containing preparations avoided.

Concomitant treatment with a thiazide diuretic increases the risk of hypercalcaemia. Cholecalciferol dosage must be determined with care in patients undergoing treatment with digitalis, as hypercalcaemia in such patients may precipitate cardiac arrhythmias.

Overdosage
Acute symptoms: anorexia, headache, vomiting, constipation.
Chronic symptoms: dyspepsia (weakness, loss of weight), sensory disturbances, possibly fever with thirst, polyuria, dehydration, apathy, accelerated growth and urinary tract infections. Hypercalcaemia ensues, with metastatic calcification of the renal cortex, myocardium, lungs and pancreas.

Treatment: Immediate gastric lavage or induction of vomiting to prevent further absorption. Liquid paraffin should be administered to promote faecal excretion. Repeated serum calcium determinations are advisable. If elevated calcium levels persist in the serum, phosphates and corticosteroids may be administered and measures instituted to bring about adequate diuresis.

Commercial Pack
Osteo-D® 20000 IU soft gelatin capsule: Each commercial box contains one Alu-PVDC blister strips of 10 capsules.
Osteo-D® 40000 IU soft gelatin capsule: Each commercial box contains one Alu-PVDC blister strips of 10 capsules.

Manufactured by
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