Hypercalcemia associated with increased parathyroid hormone-related protein (PTHrP) in a patient with medulloblastoma successfully treated with pamidronate and zoledronic acid

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Case

Age/Sex : 19/M
Chief complaint : hypercalcemia
Previous illness Hx : recurrent medulloblastoma
Symptom : constipation, lethargy, and altered mentality for 3 weeks
No family history of hypercalcemia

Laboratory findings
- Calcium : 18.2 mg/dL
- 25-OH-vitamin D/1-25-OH Vitamin D : 17.23 ng/mL, 9.79 pg/mL
- Intact Parathyroid hormone : 5 pg/mL (15-65 pg/mL)
- Pathyroid hormone related peptide : 10.7 pmol/L (< 1.1 pmol/L)

Diagnosis : humoral hypercalcemia

Treatment : single dose of intravenous pamidronate (1 mg/kg)
- single dose of intravenous zoledronic acid 5 mg

Hospital course

Conclusions

✓ Humoral hypercalcemia can be treated with multiple intravenous bisphosphonate
✓ With regard to adverse effects, symptomatic hypocalcemia can be developed which needs calcium supplementation