Epidemiology
- The prevalence of metabolite encephalopathy in HSCT recipients ranges between 3% and 13% and is more common following allogeneic transplantation.
- The condition usually develops in the first 2 months following transplantation.

Clinical manifestations:
- Usually presents with change in mental status or seizures.
- Some patients may present with classic Wernicke encephalopathy, with altered mental status, ataxia, and ophthalmoplegia.

Causes:
The main causes of metabolite encephalopathy following HSCT are:
(i) hypoxia,
(ii) electrolyte abnormalities,
(iii) metabolic acidosis,
(iv) sepsis,
(v) hepatic failure, and
(vi) medications including sedatives and analgesics.

CNS infections
Epidemiology- Central nervous system infections account for 10% of neurologic complications following HSCT. The causes and time patterns of these infections are similar to that of other organs.

Causes:
- The main causes of central nervous system infections are aspergillosis, which was found in 4.4% HSCT recipients who underwent post mortem examination.
- Central nervous system involvement by aspergillosis is usually part of disseminated disease, with other evidence of the infection.
- Other causes of central nervous system infection in this patient population are CMV, herpes zoster virus, toxoplasma, Candida, Cryptococcus, and bacterial meningitis.

Prognosis:
- Prognosis of patients with central nervous system involvement is extremely poor.