Vitamin Deficiencies (I): A, K and B1

Each vitamin fails in a characteristic way: the picture identifies it

A Vitamin A

- night blindness
- xerophthalmia
- Bitot spots
- an excess, in contrast, is teratogenic

K Vitamin K

- easy bleeding
- low factors II, VII, IX and X
- prolonged prothrombin time (INR)
- hemorrhagic disease of the newborn

B1 Vitamin B1 (thiamine)

- Wernicke encephalopathy: confusion, ataxia, ophthalmoplegia
- beriberi (wet with heart failure, dry with neuropathy)
- typical of alcohol use disorder

Night blindness
Vitamin A

Bleeding + long PT
Vitamin K

Wernicke picture
Confusion, ataxia, ophthalmoplegia: thiamine

Give thiamine before glucose: glucose alone can precipitate Wernicke · vitamin K is also the antidote for warfarin bleeding