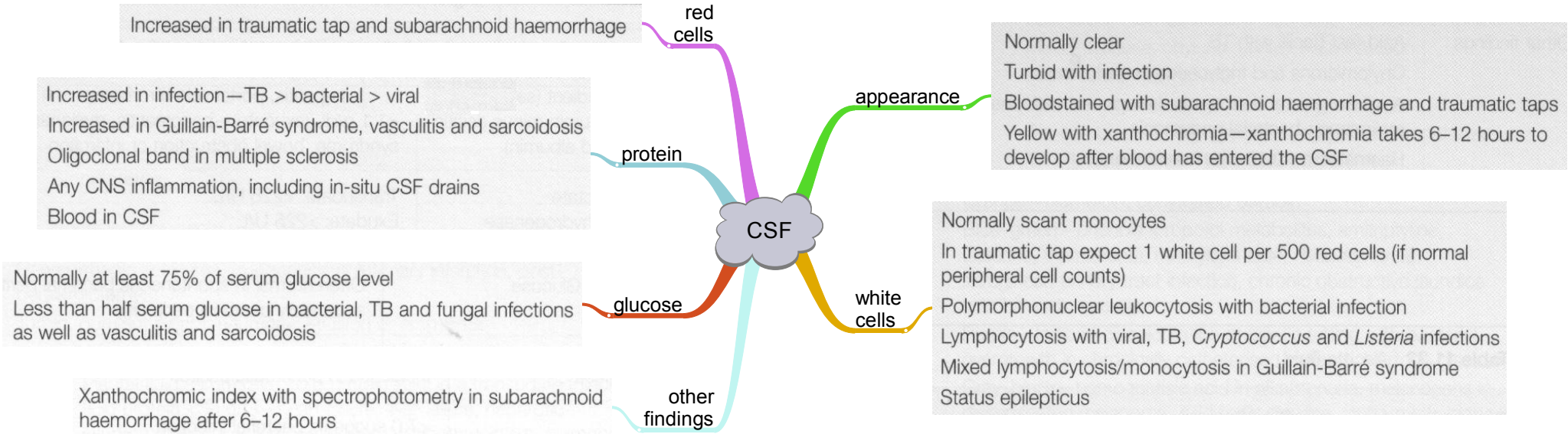
CSF
red cells
Increased in traumatic tap and subarachnoid haemorrhage
protein
Increased in infection—TB > bacterial > viral
Increased in Guillain-Barré syndrome, vasculitis and sarcoidosis
Oligoclonal band in multiple sclerosis
Any CNS inflammation, including in-situ CSF drains
Blood in CSF
glucose
Normally at least 75% of serum glucose level
Less than half serum glucose in bacterial, TB and fungal infections as well as vasculitis and sarcoidosis
other findings
Xanthochromic index with spectrophotometry in subarachnoid haemorrhage after 6–12 hours
appearance
Normally clear
Turbid with infection
Bloodstained with subarachnoid haemorrhage and traumatic taps
Yellow with xanthochromia—xanthochromia takes 6–12 hours to develop after blood has entered the CSF
white cells
Normally scant monocytes
In traumatic tap expect 1 white cell per 500 red cells (if normal peripheral cell counts)
Polymorphonuclear leukocytosis with bacterial infection
Lymphocytosis with viral, TB, Cryptococcus and Listeria infections
Mixed lymphocytosis/monocytosis in Guillain-Barré syndrome
Status epilepticus