

# A dozen causes of unconsciousness

This chart is an aid to remembering the underlying causes of unconsciousness. From HOW the patient looks, you cannot tell WHY he is unconscious. It is necessary to use the basic procedure and to be constantly aware of the possible causes of unconsciousness. There are dozens of them and remembering them is not easy. Mnemonics (such as AEIOU TIPS ([https://en.wiktionary.org/wiki/AEIOU\\_TIPS](https://en.wiktionary.org/wiki/AEIOU_TIPS))) have no internal logic and are not usable even by English speakers.

We divide the twelve causes into 4 groups: Brain (4) – Functions (2) – Blood (4) – Poisons (2). The groups are not divided strictly pathophysiologically, the aim of the division is clarity. We'll save the thirteenth cause for the end, although it needs to be figured out first...

Division into groups can also be used for milder disorders of consciousness, including whole body convulsions.

## Brain (structure)

- **Brain injury** (traumatic edema, hemorrhage, coma, including late hematomas)
- **Stroke** (CMP ischemic or hemorrhagic, air embolism, thrombosis)
- **CNS infection** (meningitis, encephalitis, brain abscess)
- **CNS tumor** (and other space-occupying lesions not elsewhere classified)

## Brain function

- **Epilepsy**
- **Psychogenic disturbance of consciousness** (neuroses, psychoses, hysteria, narcolepsy, ...) include significant stressful stimuli (urinary retention, pain, immobilization), especially in older people!

## Blood

- **Blood gases** (hypoxia, hypercapnia, watch out for tissue hypoxia in the presence of carboxyhemoglobin and methemoglobin)
- **Glycemia** (the vast majority of disorders relate to a reduced level, hyperglycemia causes rather qualitative disorders and dehydration)
- **Temperature** (subcooling and overheating)
- **Blood pressure** (hypotension of a thousand causes, but also hypertensive encephalopathy)

## Poisons

A very heterogeneous and extensive group. Refrain from the initial "flash" (and really sometimes wrong) diagnosis: **"just get drunk..."**

- **"Internal intoxication"** (sepsis, hyponatremia, hepatic coma, uremia, eclampsia, thyrotoxic crisis, hypothyroid coma, pituitary coma, adrenal insufficiency coma (Addison), hypocalcemic coma (tetany), hypercalcemic coma, ... that's *enough, isn't it?*)
- **External intoxication**
  - *It is advisable to mentally maintain this order:*
    1. carbon monoxide
    2. drugs with a sedative component in chronic medication
    3. poisoning (medications, drugs and other toxins, accidental or suicidal)
    4. ethanol ( *for safety reasons, we leave the most common cause at the end of the diagram* )

## 13. cause

The magical number thirteen will be assigned to **cardiac arrest**, which must be detected first and is here only as a reminder...

## External links

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Causes by Group



- Disorders of consciousness Havlíček et al, Neurologiepropraxi.cz 2017 (<https://www.neurologiepropraxi.cz/pdfs/neu/2017/02/03.pdf>)