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Drop Attacks

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OVERVIEW

Drop attacks are sudden spontaneous falls while standing or walking, with complete recovery in seconds or minutes. There is usually no recognized loss of consciousness and the event is remembered. It is a symptom, not a diagnosis, and it can have diverse causes. Sheldon (1960) reported that drop accounts accounted for about 1/4 of 500 consecutive falls in older patients. This estimate seems a bit high to us. Nevertheless, drop attacks are a very serious problem.

CAUSES OF DROP ATTACKS

In most instances (64%), the cause of the drop attack is never definitively established (Meissner et al, 1986). About 12% are due to the heart (a variant of [syncope](#)), 8% due to [poor circulation to the brain](#), 8% due to problems with both the heart and brain, 7% due to [seizures](#), 5% due to the inner ear ([Meniere's disease](#) -- called the otolithic crisis of Tumarkin), and 1%, due to psychological problems. Rarely, drop attacks are exaggerated startle reactions. A small number of drop attacks may be due to [SCD \(superior canal dehiscence syndrome\)](#) (Brandtberg et al, 2005)

DIAGNOSIS OF DROP ATTACKS

- Drop attacks due to cardiac disorders are similar to brief [fainting episodes](#). They are best diagnosed with "ambulatory event monitoring".
- Drop attacks due to [seizures](#) and related problems are diagnosed with EEG test and its variants.
- Drop attacks due to [Meniere's disease](#), also called "Otolithic Crises of Tumarkin", are diagnosed with an audiogram and [ENG](#). There are a variety of other tests also
- Drop attacks from [SCD](#) is diagnosed with a [VEMP](#) and a CT scan of the temporal bone (if the VEMP is abnormal).
- Drop attacks due to psychological problems are very difficult to confirm but sometimes this can be established via inpatient EEG monitoring.
- Cataplexy (a variant of narcolepsy) can present as drop attacks. Narcolepsy is diagnosed with EEG.

Of course, if you have no clue as to the origin of the drop attacks, you may have to check for all possibilities. It is possible to have no obvious cause of the drop attacks emerge, or several possibilities, In this case, good judgment and perhaps a mixture of several treatment options will need to be pursued.

RISK OF STROKE OR DEATH

The stroke rate in persons with drop attacks is 0.5%/year. This rate is not significantly different than the general population. Persons with drop attacks however do have far more fractures than the general population.

TREATMENT OF DROP ATTACKS

Drop attacks are very serious as they often result in falls and breakage of bones. Treatment is individualized according to the diagnosis. Because in many instances, no diagnosis is established, no treatment may be advocated.

Cause of Drop Attack	Most effective treatment
Cardiac disorders	Medication or pacemaker
Seizures	Anticonvulsant
Poor blood flow to brain (TIA)	Lower cholesterol, blood thinners, surgery on arteries to open them up.
Superior canal Dehiscence	Plug or patch superior canal.
Meniere's disease	Surgery or medication to destroy labyrinth

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