No such thing as a Simple Faint

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No such thing as a Simple Faint

Fainting is a very bad experience
In the wrong place at the wrong time fainting may be
associated with injuries or even death
Recovery from fainting is expected quite rapidly but:
- Its after effects are tiredness, weakness, cold, headache for up to hours
- Longer-term effects are:
  - Fear of recurrence
- Admission to hospital leading to many uncomfortable tests and frequently no diagnosis
  - At present not so well known features are:
    - Recurrence
    - Potential driving hazard
- Possibility of increased mortality over very long-term
  - Thus fainting is NEVER Simple
No such thing as a Simple Faint
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Reports of injuries associated with a faint are common
Minor injury ~29% Major injury ~ 6%

After recovery from a faint quality of life may be diminished
Agarophobia is common

Hospital admission is common 30-50% of those attending A&E are admitted to hospital where the patient spends ~3 days and frequently leaves hospital with no diagnosis or worse the wrong diagnosis e.g. epilepsy. Treatment may or may not follow but if a wrong diagnosis is made treatment has little chance of efficacy. Epilepsy will be treated with increasing numbers of drugs should recurrence occur. ~25% of those on 3 drugs do not have EPY

Recurrence is increasingly likely after 4 and almost certain after 6 episodes of syncope
Syncope: Epidemiological Data

- 40% experience syncope at least once
- ≈1% of ED visits per year
- ≈30-50% are admitted to hospital
- Account for 1-6% of hospital admissions
- 17% of falls by elderly may be due to syncope
- Injuries:
  - 6% major morbidity (e.g., fractures, MVA)
  - Minor injury in 29%

Moya A et al, ESC Syncope Guidelines, Eur Heart J 2009; 30: 2631-71
Indirect Economic Effects of Syncope-USA

Quality of Life Impact

- Anxiety/Depression: 73%¹
- Alter Daily Activities: 71%²
- Restricted Driving: 60%²
- Change Employment: 37%²

1Linzer, J Clin Epidemiol, 199144:1037-43
2Linzer, J Gen Int Med, 1994;9:181-86
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Other Considerations

Is a simple faint a contraindication to driving?

Does fainting carry any adverse prognosis?
No such thing as a simple faint

Is a simple faint a contraindication to driving?

Olshansky review in 2016 JACC EP
Syncope at the wheel is rare but is, nevertheless a problem as yet unresolved.

Accidents due to syncope in London bus drivers 1/115m miles
Sheldon Calgary Canada Am J Cardiol 1995
217 VVS pts. 5 syncope while driving, 4 had accidents.
Conclusion: Low risk 0.33%/driver/yr.
NASPE Circulation 1996 Epstein et al Recommendations:
Driving OK if ‘mild’ but not if ‘severe’ and ‘untreated’.
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Is a simple faint a contraindication to driving?

Bhatia et al Milwaukee PACE 1999
155 VVS pts (34% had no prodrome) 2 had syncope at the wheel. 1 injured

Li et al Am J Cardiol 2000
23 (9.4%) of 245 syncope pts. Had syncope while driving 1 injured and 1 died

Sorajji et al Circulation 2009 3800 patients referred with syncope to specialist unit (Mayo Clinic) 10% had syncope while driving

Adverse features for recurrence were males, youth, CVD/stroke

Recurrence was only very rarely while driving
No such thing as a simple faint

Is a simple faint a contraindication to driving?

**Canadian Cardiovascular Society** Can J Cardiol 2004
Diving with history of syncope is acceptable if risk of death & injury is <0.005%/driver-year equivalent to 1 crash with serious harm per 20000 pts./yr. OK if only 1 syncope; OK if prodrome.

**Tan et al Sheldon’s group** JACC EP 2016 prospective study of POST1 & 2 studies of patients in placebo or no effective treatment arms. Pts. were very symptomatic >10 lifetime syncope. Short FU 0.77 yrs. 174 of 418 has syncope recurrence. Probability of syncope recurrence 0.62%/pt/yr. Probability of harm 0.0035%/pt/yr.

This figure is the same risk as for the general population BUT few details of amount & history of driving. Under-reporting likely
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Is a simple faint a contraindication to driving?

Nume et al Ruwald’s group JAMA Intern Med 2016

Danish population >18 years is 4.265m. Of these 41039 had attended hosp. for syncope (ED or IP). Median age 66yrs. 51% female. 34.8% had CVD.

Median FU 2 yrs. 1791 (4.4%) had subsequent MV crash. This is 20.6 MV crashes/1000person-years compares with 12.1 in general population. Males more.

5-year crash risk 8.2% in those with PH of syncope with hosp. attendance compared with 5.1% in general population.

Conclusion: Prior hospitalisation for syncope should be included in the consideration of fitness to drive.
Is a simple faint a contraindication to driving?

What can we conclude from these publications?

- Syncope is dangerous but not very dangerous.
- Since syncope occurs in approximately half the general population the available data is not very accurate.

Some consensus on risk of
- recurrent syncope;
- past history of hospitalisation for syncope;
- lack of prodrome for syncope;
- syncope in structural or arrhythmic heart disease.
Driving is administered by DVLA, a Government Agency

Drivers are divided into 2 categories

Group 1 Cars Non-commercial
Group 2 Large vehicles Commercial

Licences are up to age 70 years after which they must be renewed every three years possibly requiring a medical examination

The driver must notify the DVLA if unfit to drive

The doctor must advise the patient

The doctor must consider responsibility to the public in addition to confidentiality of the patient’s condition. The doctor should advise the patient, if it is necessary for him/her to inform DVLA
Transient Loss of Consciousness (TLOC)
Syncope must be considered as a cause
(Here Epilepsy is not discussed)
Important features are:
1. Provocation
2. Posture
3. Prodrome
UK DVLA Driving and Syncope

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<th>Group 1</th>
<th>Group 2</th>
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<tbody>
<tr>
<td>VVS</td>
<td></td>
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<tr>
<td>Standing</td>
<td>OK</td>
<td>NO</td>
</tr>
<tr>
<td>Sitting</td>
<td>Avoidable trigger-OK</td>
<td>NO</td>
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Syncope with avoidable trigger

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# UK DVLA Driving and Syncope

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<tr>
<th></th>
<th>Group 1</th>
<th>Group 2</th>
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<tbody>
<tr>
<td><strong>Unexplained syncope</strong></td>
<td><strong>Standing</strong> NO</td>
<td><strong>Sitting</strong> NO</td>
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<tr>
<td><strong>Cardiovascular Syncope</strong></td>
<td><strong>Standing</strong> NO</td>
<td><strong>Sitting</strong> NO</td>
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**Standing** NO

**Sitting** NO

NO

NO
TLOC with severe markers

1. Loss of consciousness >5min
2. Amnesia >5min
3. Injury
4. Tongue biting
5. Incontinence
6. Post-ictal confusion
7. Post-ictal headache
UK DVLA Driving and Syncope

Rules are complex but cover most conditions

Medical advisers are available to discuss but they tend to be intransigent and may not be familiar with latest literature

Revisions are frequent - at least annually

2016 publications not yet included
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Does fainting carry any adverse prognosis?

Standard wisdom is that it does not BUT
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Conclusions

There is no such thing as a simple faint

All require a diagnosis and management

There are potential problems such as driving and long-term prognosis