Physiological Discrimination of Headache Disorders

Headache:
- Nausea
- Photophobia
- Eye watering
- Flushing
- Pupil changes

Clinical Diagnostic Criteria (ICHD and others):
- Migraine with/without Aura
  - Chronic Migraine
- Post-traumatic Headache
- Trigeminal Cephalgias

Cutaneous hemodynamic changes
1. Spontaneous
2. Evoked responses

Groups (age-matched):
- 12 non-headache controls
- 16 headache subjects
  - 9 episodic migraine (MA)
  - 7 chronic migraine (CM)

Possible mediators of migraine:
- Sensory hyper-excitability
  - Affective
- Autonomic dysfunction

Reflectance change (%)
Time (s)
Amplitude
Frequency (Hz)

Pre Post

MA   CM   NH   MA   CM   NH

0.2 0.1 0.0

0.5 0.3 0.1

0.0 0.1 0.0