Chronic Daily Headache (CDH)

Diagnosis and Treatment

Headaches are one of the most common complains of patients in our daily practices. While it is important to be aware of critical causes like Intra-cranial bleeds or Space occupying lesions, diagnosis and treatment of chronic daily headaches can be a major challenge as well.

The approach to the patient with CDH is straightforward. First, a diagnosis must be made. There are several diagnostic categories of CDH, including:

- Constant (lasts all day)
- Daily but not constant (lasting for minutes or hours)
- Secondary (due to an underlying medical illness)
- Primary (not related to structural or systemic illness)

Once a primary form of CDH is diagnosed (see table on page 2 titled Primary Types of CDH), it is important to educate patients and involve them in the treatment plan. Early consultation with a headache specialist is appropriate.

Your feedback would be critical in improvement of this bulletin. Please send your point of view to krod@tpclinic.com.
Primary Types of CDH

- Chronic tension-type headache
- Chronic migraine (formerly known as transformed migraine with or without analgesic rebound)
- New daily persistent headache
- Chronic cluster headache
- Hemicrania continua
- Chronic paroxysmal hemicrania
- Hypnic headache
- Idiopathic stabbing headache
- SUNCT (short-lasting, unilateral neuralgiform headaches with conjunctival injection and tearing)
- Cranial neuralgias (e.g., trigeminal neuralgia)

Secondary Types of CDH

- Post-traumatic (may mimic any primary headache)
- Cervicogenic (especially C2, C3 upper root entrapment)
- Temporomandibular joint syndrome
- Sinus disease
- Arteriovenous malformation
- Arteritis (including giant cell arteritis)
- Subdural hematoma
- Vascular dissection
- Neoplasm
- Infections
- Intracranial hypertension
- Intracranial hypotension

Diagnostic criteria for Cervicogenic headaches

Criteria for the diagnosis of cervicogenic headache are proposed, which include unilateral head pain, symptoms and signs of neck involvement, non-clustering episodic moderate pain originating in the neck then spreading to the head, and response to root or nerve blockade; plus rarer and non-obligatory features such as autonomic disturbances, dizziness, phonophobia, monocular visual blurring, and difficulty swallowing.

This type of headaches is very common after whiplash injuries in MVA or other similar Acceleration Deceleration cervical spine injuries. Cervical Zygaphysseal joints injuries can be the origin of Cervical facet joints pain with headaches or facial pain presentations due to the upper cervical nerves common neural pathway with trigeminal nerve. Nerve block injections and cervical anterior medial branch Rhyzotomy can be used for treatment of these type of headaches.

Medication Overuse

Treating patients with CDH can be challenging, particularly if the headaches are complicated by medication overuse. Often, patients may not realize that excessive or frequent self-treatment may actually worsen their condition. Continued overuse of immediate-relief medications, particularly in headache-prone patients, may result in refractoriness to treatment (prophylactic medications may not work), perpetuation of the headaches, and a transformation from a pattern of intermittent migraine to one of CDH. The diagnosis of CDH may be obscured by medication-overuse headache. A 2-month period is required after cessation of medication overuse to establish the diagnosis with certainty.

Virtually any medication used more than 2 to 3 days per week may cause these phenomena, including off-the-shelf remedies such as acetaminophen and prescription agents such as the triptans. Combination products containing caffeine and butalbital may be especially likely to generate “analgesic rebound,” whereas drugs with a longer duration of action (i.e., a longer half-life) may be less likely to do so. Clinicians should be careful to screen CDH patients for medication overuse and should make it a point to counsel their patients about the risks of analgesic overuse and rebound headache.

Confounding overuse of medications must be stopped. Many drugs can be abruptly stopped, although measures must be taken to cover the withdrawal headache that will likely ensue. Sometimes a steroid taper and an antiemetic will suffice. Drugs such as narcotics, butalbital, and benzodiazepines in general should not be stopped abruptly but rather should be tapered. The use of clonidine for opioid withdrawal or the temporary substitution of phenobarbital for butalbital to avoid seizures or other serious withdrawal symptoms may be instituted to moderate withdrawal. Intravenous dihydroergotamine (DHE) given over several days may provide sufficient relief of the underlying headache to allow the patient to discontinue the offending acute medications.
**Acute Treatment**

Many patients can be helped through outpatient therapy, and the diagnosis will determine the most appropriate choice of acute treatment (see table below). However, limits on acute medication use of 2 to 3 days per week need to be instituted, along with avoidance of the agent that was being overused. For example, if the patient is experiencing chronic migraine, antimigraine agents such as the triptans, nonsteroidal anti-inflammatory drugs (NSAIDs), and DHE can be effective, provided the patient has not previously overused any symptomatic medication. Chronic tension-type headache (CTTH) can be effectively managed with analgesics. For hemicrania continua and chronic paroxysmal hemicrania, prompt resolution of the headache with a trial of indomethacin 50 mg 3 times a day for 48 hours will establish the diagnosis. As with other forms of CDH, secondary forms need to be considered, and confounding medication overuse needs to be addressed. Most patients will have a dramatic response to indomethacin and a lesser response to other NSAIDs.

### Limitation Guidelines for Use of Abortive Therapies in Headache

<table>
<thead>
<tr>
<th>SUBSTANCE/MEDICATION</th>
<th>GUIDELINES</th>
<th>Treatment day = 24 hours</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caffeine (often found in combination over-the-counter [OTC] and prescription medications)</td>
<td>2 treatment days/week. Both dosage &amp; frequency of use affect development of withdrawal headaches or symptoms. Caffeine from beverage consumption also contributes to total dosage.</td>
<td></td>
</tr>
<tr>
<td>Codeine</td>
<td>2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Oxycodone</td>
<td>2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Butalbital</td>
<td>2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Propoxyphene</td>
<td>2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Butorphanol</td>
<td>2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Ergotamine tartrate: oral (p.o.), rectal, sublingual</td>
<td>8 treatment days/month or 2 treatment days/week (or less)</td>
<td></td>
</tr>
<tr>
<td>Almotriptan</td>
<td>8 treatment days/month or 2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Eletriptan</td>
<td>8 treatment days/month or 2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Frovatriptan</td>
<td>8 treatment days/month or 2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Sumatriptan succinate: subcutaneous (SQ), p.o., rapid-release tablet, intranasal</td>
<td>8 treatment days/month or 2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Naratriptan hydrochloride: p.o.</td>
<td>8 treatment days/month or 2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Rizatriptan benzoate: p.o. and orally disintegrating tablet</td>
<td>8 treatment days/month or 2 treatment days/week</td>
<td></td>
</tr>
<tr>
<td>Zolmitriptan: p.o., oral disintegrating tablet, intranasal</td>
<td>8 treatment days/month or 2 treatment days/week</td>
<td></td>
</tr>
</tbody>
</table>

**Note:** In general, use of opiates/opioids for the symptomatic management of pain should be limited to instances in which acute abortive therapy has failed or is contraindicated. Opioids should be limited to no more than 2 days/wk, regardless of which agent is used. However, when they are used, they should be administered at a sufficient dose to provide adequate analgesia.
Preventive Treatment

Patients with very frequent headaches should be treated primarily with preventive medications (see National Headache Foundation [NHF] guidelines on “Preventive Treatment of Migraine”) to reduce the frequency, severity, and duration of the headaches. Choices for prevention of CTTH, new daily persistent headache, and chronic migraine are best made on the basis of concomitant or comorbid conditions. Medications should generally be started at a low dose, followed by gradual increases in dose until efficacy is achieved, side effects become intolerable, or the ceiling dose is reached. Nonpharmacologic treatments such as biofeedback, stress management, and cognitive behavioral therapy should also be considered. Monotherapy is the preferred approach, as the prescription of copharmaceutical treatments should be reserved for physicians specializing in the treatment of headache. Specific therapies exist for chronic paroxysmal hemicrania and hemicrania continua (e.g., indomethacin). The same is true for hypnic headaches, cranial neuralgias, and chronic cluster headache.

Psychiatric comorbidities such as anxiety and depression are common and need to be considered. All forms of psychiatric comorbidities may be complicated by medication overuse, which may limit the effectiveness of preventive medications; therefore, medication overuse also needs to be addressed. It is also critical to communicate realistic expectations to patients, as it may take up to 6 weeks or more for preventive medications to become fully effective.

Inpatient Treatment

For patients who fail to respond to outpatient treatment, or whose conditions are too complicated for outpatient detoxification and treatment, inpatient treatment may be considered. Outpatient treatment is best conducted in a setting with experienced practitioners who can take a multidisciplinary approach to the medical issues. The mainstay of the approach is to resolve medication overuse, cover the withdrawal headache likely to occur in the first several days after admission, address comorbid and coexistent conditions, and institute preventive therapy. Intravenous regimens that have been used for intractable headache include repetitive metoclopramide and DHE, neuroleptics (such as chlorpromazine), valproate, or ketorolac. More information can be found in the NHF guidelines on “Inpatient Headache Treatment.”

Other Treatments

Less commonly used treatment modalities for CDH may be best employed by practitioners who are headache experts. These modalities include nerve blocks (e.g., occipital nerve blocks), trigger point injections, and injections of botulinum toxin. In some cases of “cervicogenic headache,” especially in some cases of post-traumatic headache, some experts advocate procedures directed against the C2 and/or C3 nerve roots, with deep X-Ray or CT-guided blocks said to be diagnostic. Ultimately, the best approach to CDH is to make a clear diagnosis early and to institute treatment early, before disability becomes manifest and the situation becomes complicated by medication overuse and psychiatric issues. Early referral of the patient to a practitioner skilled in the diagnosis and treatment of headache is essential. Patients with refractory headache may need to be admitted for inpatient treatment.

References:

The main body of this paper was selected from the Treatment of Primary Headache: Chronic Daily Headache in the National Headache Foundation’s Standard of Care for Headache Diagnosis and Treatment.


Contact Information

Toronto Poly Clinic
5460 Yonge Street Unit 204
Toronto, Ontario M2N 6K7
Tel: 416.250.7171
Fax: 416.250.0323
info@tpclinic.com

Toronto Poly Clinic – Markham Branch
298 John Street Unit CRU 3
Thornhill, Ontario L3T 5W4
Tel: 905.482.8648
Fax: 905.482.8647