

TABLE 21-3 CLASSIFICATION OF CHRONIC DAILY HEADACHE

Primary		
>4 h Daily	<4 h Daily	Secondary
Chronic migraine ^a	Chronic cluster headache ^b	Posttraumatic Head injury Iatrogenic Postinfectious
Chronic tension-type headache ^a	Chronic paroxysmal hemicrania	Inflammatory, such as Giant cell arteritis Sarcoidosis Behçet's syndrome
Hemicrania continua ^a	SUNCT/SUNA	Chronic CNS infection
New daily persistent headache ^a	Hypnic headache	Medication-overuse headache ^a

^aMay be complicated by medication overuse. ^bSome patients may have headache >4 h/d.

Abbreviations: CNS, central nervous system; SUNA, short-lasting unilateral neuralgiform headache attacks with cranial autonomic symptoms; SUNCT, short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing.

CHRONIC DAILY HEADACHE

The broad diagnosis of chronic daily headache (CDH) can be applied when a patient experiences headache on 15 days or more per month. CDH is not a single entity; it encompasses a number of different headache syndromes, both primary and secondary (Table 21-3). In aggregate, this group presents considerable disability and is thus specially dealt with here. Population-based estimates suggest that about 4% of adults have daily or near-daily headache.

APPROACH TO THE PATIENT: Chronic Daily Headache

The first step in the management of patients with CDH is to diagnose any secondary headache and treat that problem (Table 21-3). This can sometimes be a challenge where the underlying cause triggers a worsening of a primary headache. For patients with primary headaches, diagnosis of the headache type will guide therapy. Preventive treatments such as tricyclics, either amitriptyline or nortriptyline at doses up to 1 mg/kg, are very useful in patients with CDH arising from migraine or tension-type headache or where the secondary cause has activated the underlying primary headache. Tricyclics are started in low doses (10–25 mg) daily and may be given 12 h before the expected time of awakening in order to avoid excess morning sleepiness. Anticonvulsants, such as topiramate, valproate, flunarizine (not available in the United States), and candesartan are also useful in migraine.

MANAGEMENT OF MEDICALLY INTRACTABLE DISABLING PRIMARY CHRONIC DAILY HEADACHE

The management of medically intractable headache is difficult. Currently there are a number of promising neuromodulatory approaches, such as occipital nerve stimulation, which appears to modulate thalamic processing in migraine, and has also shown promise in chronic cluster headache, short-lasting unilateral neuralgiform headache attacks with cranial autonomic symptoms (SUNA), short-lasting unilateral neuralgiform headache attacks with conjunctival injection and tearing (SUNCT), and hemicrania continua (Chap. 447). Single-pulse transcranial magnetic stimulation is in use in Europe and is approved for migraine with aura in the United States. Other modalities are discussed in Chap. 447.

MEDICATION-OVERUSE HEADACHE

Overuse of analgesic medication for headache can aggravate headache frequency, markedly impair the effect of preventive medicines, and induce a state of refractory daily or near-daily headache called *medication-overuse headache*. A proportion of patients who stop

taking analgesics will experience substantial improvement in the severity and frequency of their headache. However, even after cessation of analgesic use, many patients continue to have headache, although they may feel clinically improved in some way, especially if they have been using opioids or barbiturates regularly. The residual symptoms probably represent the underlying primary headache disorder, and most commonly, this issue occurs in patients prone to migraine.

Management of Medication Overuse: Outpatients For patients who overuse medications, it is essential that analgesic use be reduced and eliminated. One approach is to reduce the medication dose by 10% every 1–2 weeks. Immediate cessation of analgesic use is possible for some patients, provided there is no contraindication. Both approaches are facilitated by the use of a medication diary maintained during the month or two before cessation; this helps to identify the scope of the problem. A small dose of a nonsteroidal anti-inflammatory drug (NSAID) such as naproxen, 500 mg bid, if tolerated, will help relieve residual pain as analgesic use is reduced. NSAID overuse is not usually a problem for patients with daily headache when a NSAID with a longer half-life is taken once or twice daily; however, overuse problems may develop with more frequent dosing schedules or shorter acting NSAIDs. Once the patient has substantially reduced analgesic use, a preventive medication should be introduced. It must be emphasized that *preventives generally do not work in the presence of analgesic overuse*. The most common cause of unresponsiveness to treatment is the use of a preventive when analgesics continue to be used regularly. For some patients, discontinuing analgesics is very difficult; often the best approach is to directly inform the patient that some degree of pain is inevitable during this initial period.

Management of Medication Overuse: Inpatients Some patients will require hospitalization for detoxification. Such patients have typically failed efforts at outpatient withdrawal or have a significant medical condition, such as diabetes mellitus, which would complicate withdrawal as an outpatient. Following admission to the hospital, acute medications are withdrawn completely on the first day, in the absence of a contraindication. Antiemetics and fluids are administered as required; clonidine is used for opioid withdrawal symptoms. For acute intolerable pain during the waking hours, aspirin, 1 g IV (not approved in United States), is useful. IM chlorpromazine can be helpful at night; patients must be adequately hydrated. Three to 5 days into the admission, as the effect of the withdrawn substance wears off, a course of IV dihydroergotamine (DHE) can be used. DHE, administered every 8 h for 5 consecutive days, can induce a significant remission that allows a preventive treatment to be established. 5-HT₃ antagonists, such as ondansetron or granisetron, or the neurokinin receptor antagonist, aprepitant, may be required with DHE to prevent significant nausea, and domperidone (not approved in the United States) orally or by suppository can be very helpful. Avoiding sedating or otherwise side effect prone antiemetics is helpful.

NEW DAILY PERSISTENT HEADACHE

New daily persistent headache (NDPH) is a clinically distinct syndrome; its causes are listed in Table 21-4.

TABLE 21-4 DIFFERENTIAL DIAGNOSIS OF NEW DAILY PERSISTENT HEADACHE

Primary	Secondary
Migrainous-type	Subarachnoid hemorrhage
Featureless (tension-type)	Low cerebrospinal fluid (CSF) volume headache Raised CSF pressure headache Posttraumatic headache ^a Chronic meningitis

^aIncludes postinfectious forms.