

Diagnosis and Classification of Headache Disorders

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OVERVIEW

- **Classification vs. diagnosis**
- **Types of classification systems**
- **What's new in ICHD-2**
- **What has changed since 2004**
- **Algorithms you can use**
- **Algorithm based diagnosis**

Distinguish

- **Classification-** a system for diagnosing a group of disorders (ICHD-2)
- **Diagnosis-** applying the classification to a particular patient

Types of classification systems

- **Symptomatic vs. etiologic**
- **Continuous vs. categorical**
- **Which is ICHD-2?**
- **Which is more powerful?**

STRUCTURE OF ICHD-2

- Part 1 Primary Headaches
(symptom-based)**
- Part 2 Secondary Headaches
(etiologic)**
- Part 3 Cranial Neuralgias, Central and
Primary Facial Pain and Other
Headaches**

ATTRIBUTES OF ICDH-1 AND ICDH-2

- Modeled on DSM system
- Designed to create a common language
- Foundation for research and patient care
- Operational rules
 - Explicit criteria
 - Benefit: clarity and reliability due to sharp boundaries
 - Price: arbitrary, complex, may not map onto biology

ICHD-2 Migraine without aura

- At least **5** lifetime attacks lasting **4 to 72** hours
- **2 of 4** pain features
- **1 of 2** associated symptoms
- **Not attributable to another disorder**

ATTRIBUTES OF ICDH-1 AND ICDH-2

- **Hierarchical**
 - 1 **Migraine**
 - 1.2 **Migraine with aura**
 - 1.2.4 **Familial hemiplegic migraine (CACN A1 mutation)**
- **ICHD-2 (2004)**
 - **Reflects research on ICHD-1 (1988)**
 - **Insights into biology and genetics**

STRUCTURE OF ICHD-2

Part 1 Primary Headaches

- 1 Migraine**
- 2 Tension-Type Headache**
- 3 Cluster Headache and Trigeminal
 Autonomic Cephalgias (TACS)**
- 4 Other Primary Headache**

MAJOR CHANGES TO THE CLASSIFICATION OF PRIMARY HEADACHES BY CHAPTER

1. Migraine

Chronic migraine (1.5.1)

Probable migraine (1.6)

2. Tension type headache

Distinguished low frequency, high frequency and CTTH

3. Cluster and Trigeminal Autonomic Cephalgias

-Cluster

-Paroxysmal hemicrania

-SUNCT

-Probable TAC

MAJOR CHANGES TO THE CLASSIFICATION OF PRIMARY HEADACHES

4. Other Primary Headache

Hypnic headache

Primary thunderclap headache

Hemicrania continua

New daily persistent headache

STRUCTURE OF ICHD-2

Part 1 Primary Headaches

Part 2 Secondary Headaches

Headache attributed to:

- 5 Head/neck trauma**
- 6 Vascular disorders**
- 7 Non-vascular intracranial disorder**
- 8 A substance or its withdrawal**
- 9 Infection**
- 10 Disorders of homeostasis**
- 11 Disorders of the cranium,
neck or facial structures**
- 12 Psychiatric disorders**

MAJOR CHANGES TO THE CLASSIFICATION OF SECONDARY HEADACHE

- **Criteria have consistent structure**
 - A. **Headache characterized by XXX**
 - B. **Underlying disorder known to cause headache has been demonstrated**
 - C. **Headache occurs with a temporal relationship to the underlying disorder**
 - D. **Headache remits when the underlying disorder resolves**
- **Two new categories in ICHD-2**
 - **Disorders of homeostasis (10)**
 - **Psychiatric disorders (12)**

**Distinguishing secondary
headache and exacerbation of
primary headache**

ALGORITHMIC APPROACH TO ICHD2 DIAGNOSIS

- **Separate primary and secondary headache**
- **Approach each type of primary headache based on attack duration and then frequency**
- **Ultimately defining syndromes is desirable**

Primary Headaches

Assess frequency and duration for each headache type

Divide into headache syndromes

Short Duration
< 4° duration

Recurrent - Long Duration
≥ 4° duration
≤ 15 days/month

Chronic Daily Headache
≥ 4° duration
≥ 15 days/month

PATIENT HISTORY

- **A 16 year old female with menstrual migraine since age 12**
- **Headaches increased in frequency over the last year**
- **Unilateral, throbbing, severe headaches with nausea and osmophobia occur 8 days/month**
- **Headache 28 days/month and last 6-12 hours**
- **Menstrual exacerbation**
- **General medical and neurological exams normal**
- **MRI 3 weeks ago normal**

Primary Headaches

Assess frequency and duration for each headache type

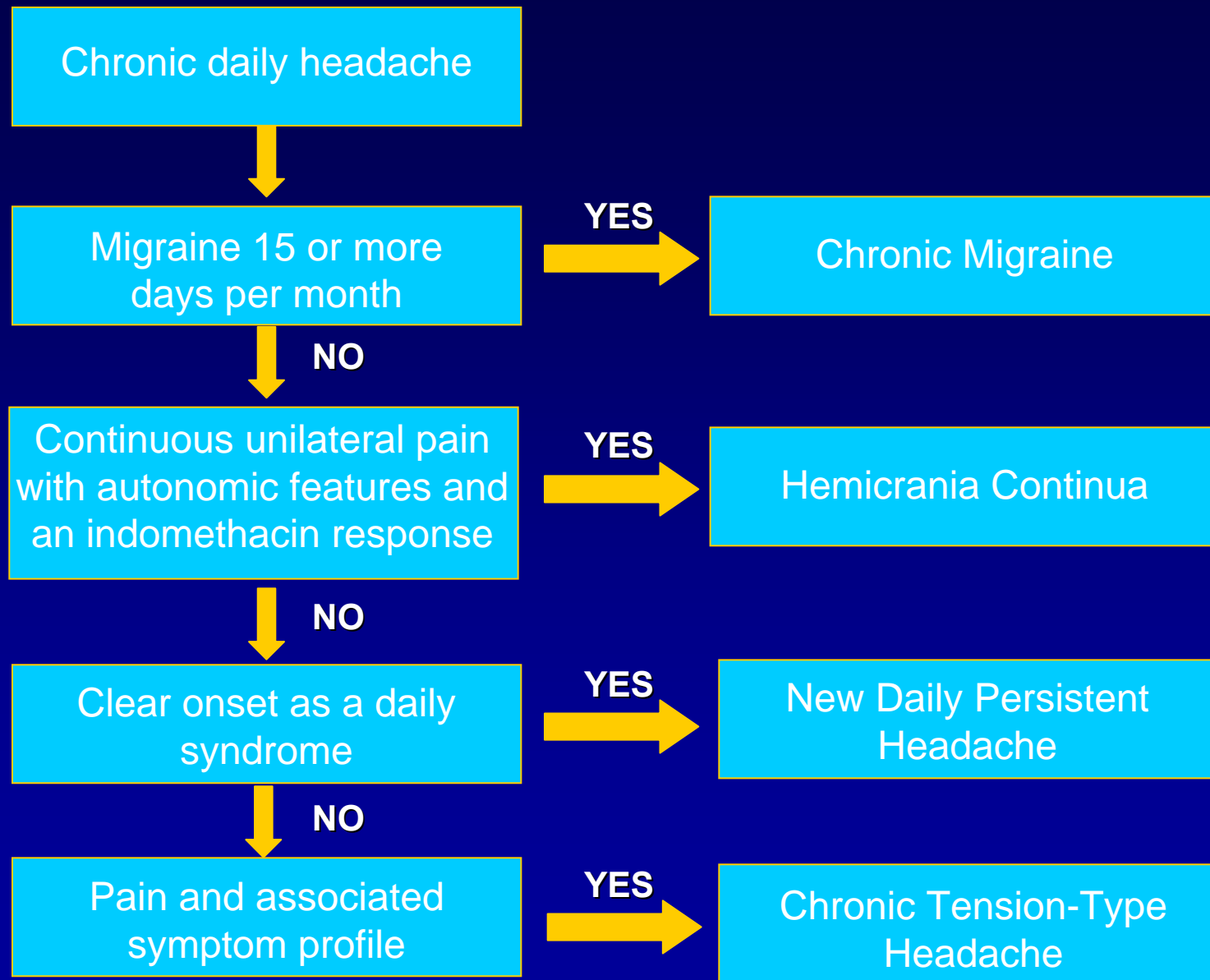
Divide into headache syndromes

Short Duration
< 4° duration

Recurrent - Long Duration
≥ 4° duration
≤ 15 days/month

Chronic Daily Headache
≥ 4° duration
≥ 15 days/month

DIAGNOSIS OF PRIMARY CHRONIC DAILY HEADACHE



CHRONIC MIGRAINE

1.5.1 CHRONIC MIGRAINE (ICHD-2)

- A. Headache 15 days per month fulfilling criteria C and D for migraine without aura
- B. Not attributable to another disorder

1.5.1 Chronic migraine (ICHD-2R)

- Headache 15 or more days per month with 8 attacks that meet criteria for MO or that respond to migraine specific medications.

Medication overuse headache

Patient -2-

- **A 40 year old man**
- **5 to 9 attacks per day**
- **Unilateral retroorbital severe pain**
- **Lasts 10 to 15 minutes each**
- **Associated with redness of the eye, lacrimation, rhinorrhea,**

Primary Headaches

Assess frequency and duration for each headache type

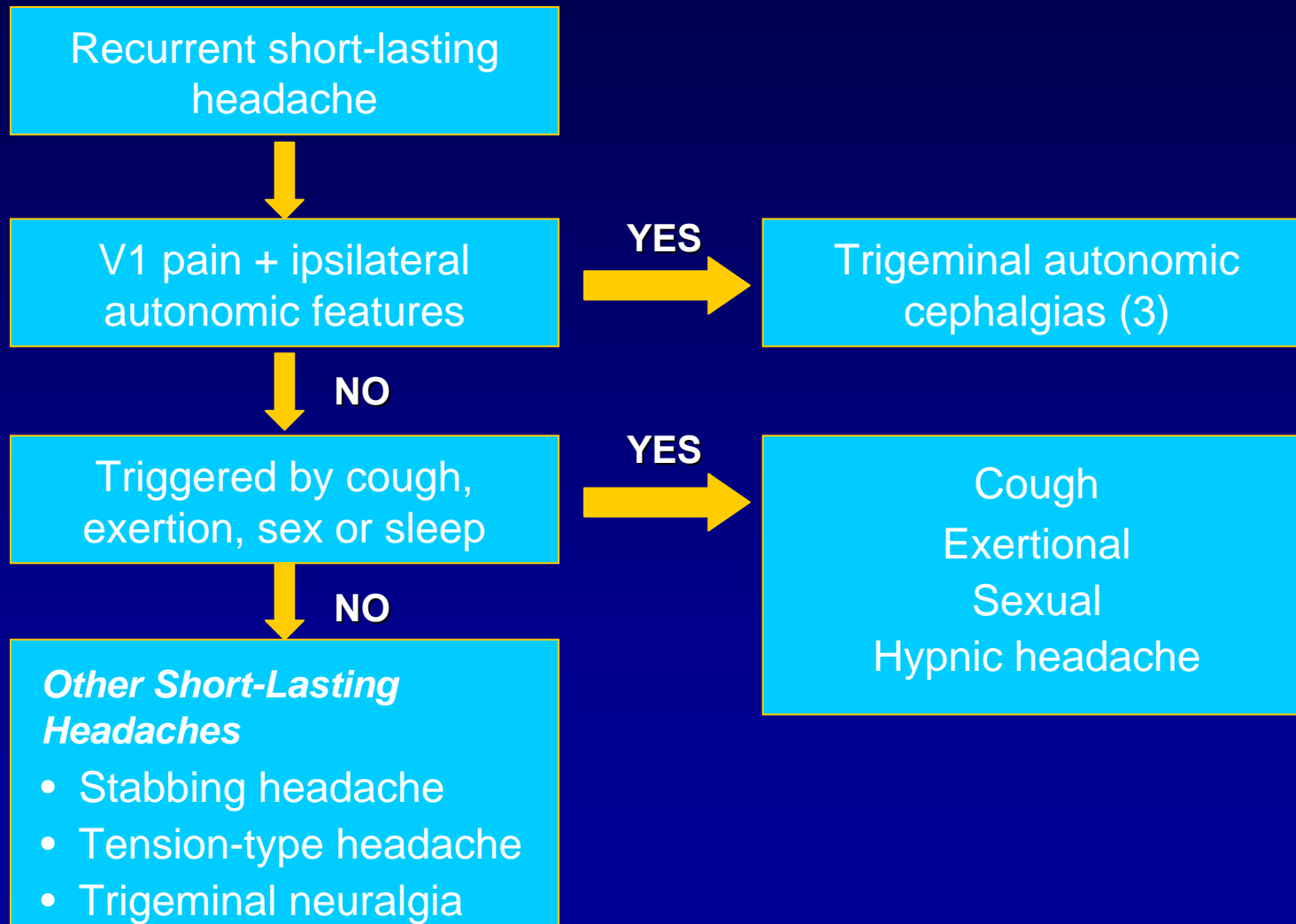
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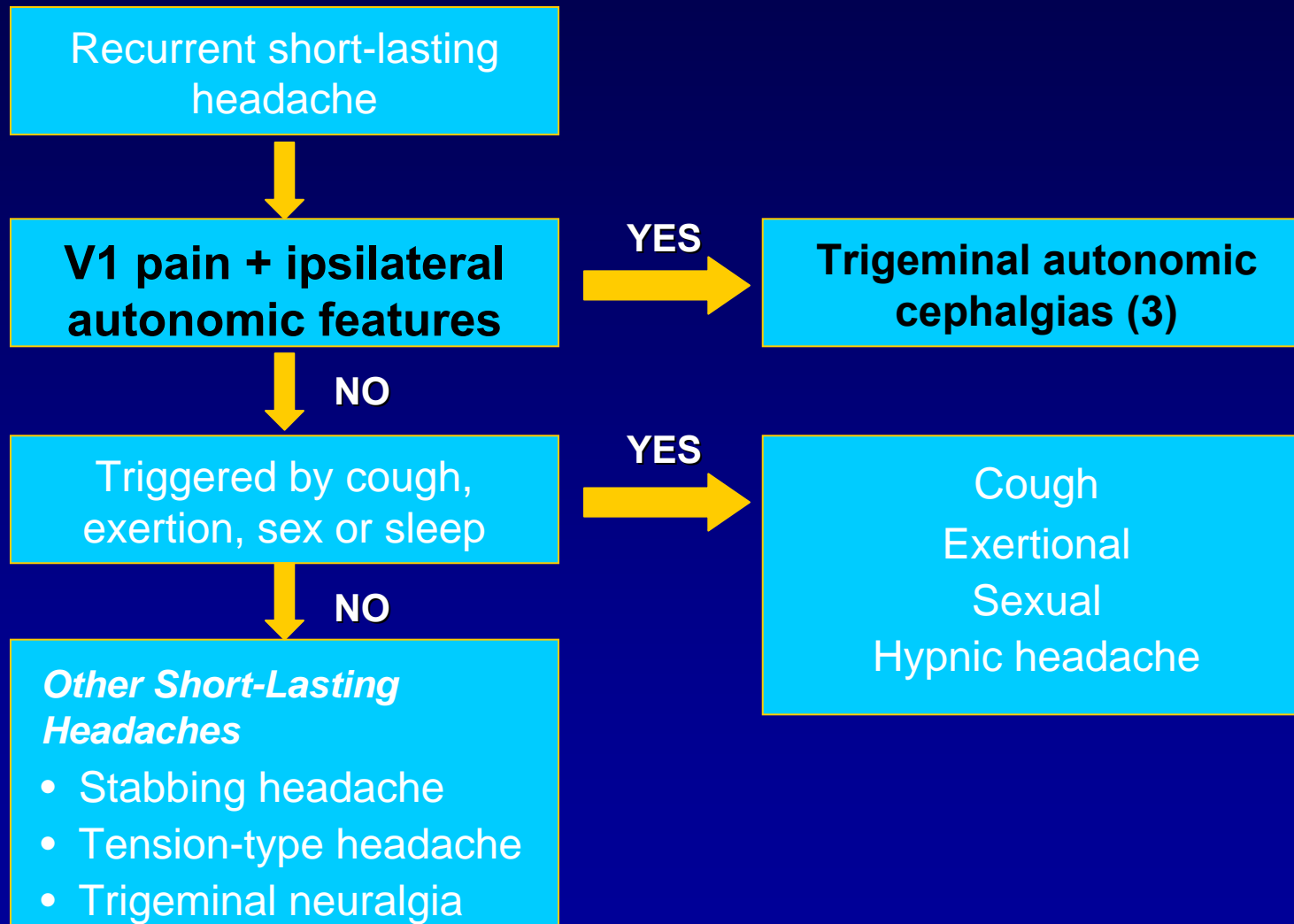
Recurrent - Long Duration
≥ 4° duration
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Chronic Daily Headache
≥ 4° duration
≥ 15 days/month

DIAGNOSIS OF RECURRENT SHORT-DURATION HEADACHES



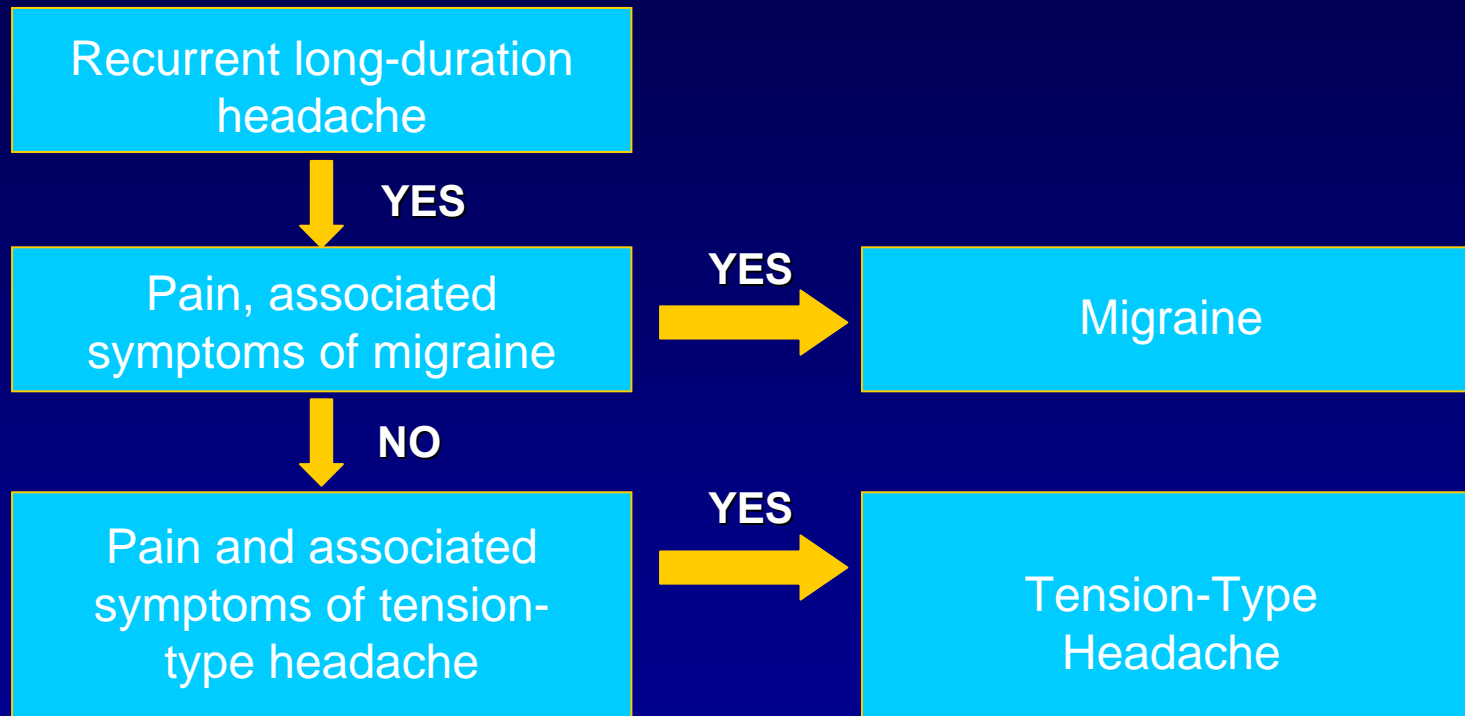
DIAGNOSIS OF RECURRENT SHORT-DURATION HEADACHES



Differential diagnosis of TACs

- **Cluster headache**
- **Paroxysmal hemicrania**
- **SUNCT**

DIAGNOSIS OF RECURRENT LONG-DURATION HEADACHES



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