

## CASE REPORT

# Hemicrania continua responsive to rofecoxib

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### Introduction

Hemicrania continua (HC) is a rare headache disorder first described by Sjaastad & Spierings in 1984 (1). It is manifested by continuous, moderately severe, unilateral headaches, associated with ipsilateral autonomic disturbances. Pain intensity may fluctuate throughout the day. HC exists in both continuous and remitting forms (2).

Silberstein *et al.* (3) proposed criteria for HC, including the absolute response to indomethacin.

We report a case of HC completely responsive to a new non-steroidal anti-inflammatory drug (NSAID), rofecoxib.

### Case report

A 48-year-old woman presented with a 6-year history of left sided headache, strictly unilateral hemicrania, throbbing type, initially once a month, but frequency increased, having been on a daily basis for 6 months.

The headache lasted 12–24 h in the first 5.5 years of history, and turned to a continuous pattern 6 months prior to the diagnosis. The pain intensity was moderate, but fluctuating throughout the day, with 1–2 h exacerbation of pain, once a day, usually in the afternoon, and always accompanied by autonomic disturbances such as lacrimation and ocular injection. Her headaches were incapacitating at this point. Analgesics such as dipyrrone, paracetamol, and acetylsalicylic acid provided no relief.

She had no photophobia, phonophobia, nausea or vomiting. Precipitating factors were not observed. Past medical history revealed type II diabetes mellitus, on insulin therapy, and chronic renal failure on a conservative treatment.

Physical and neurological examinations were normal, as were routine blood tests and a computed tomography (CT) scan of the brain.

An indomethacin trial test was done, and renal

function was monitored. The patient was responsive to 100 mg of indomethacin. We discontinued indomethacin, but when the pain returned we tried rofecoxib 25 mg qd, with a complete pain relief in 2 days, and there were no side-effects observed. Renal function was also monitored and had not worsened. The patient had been asymptomatic for 5 months. Any attempt to discontinue the drug resulted in pain recurrence.

### Discussion

Rofecoxib (4-(4'-methylsulphonylphenyl)-3-phenyl-2-(5H)-furanone) is a new NSAID, a cyclooxygenase (COX)-2-specific inhibitor. It is essentially equipotent to indomethacin both *in vitro* and *in vivo* (4), and its efficacy is comparable to ibuprofen with good tolerability (5).

Trucco *et al.* (6) reported a patient responded to piroxicam-beta-cyclodextrin, another NSAID with less gastric discomfort than indomethacin, but still with COX-1 action. Kumar & Bordiuk (7) also reported HC responsive to both ibuprofen and indomethacin, but the patient discontinued medication because of a duodenal ulcer and gastrointestinal bleeding.

The so-called indomethacin-responsive headaches are HC, chronic paroxysmal hemicrania, exertional headaches and 'jabs and jolts' headache. These patients may use indomethacin on a long-term basis, and are likely to suffer from well-known NSAIDs complications. The potential use for new COX-2-specific NSAIDs opens a wide range therapeutic window for this group of headaches. Celecoxib is another potential drug to be tested in the near future.

Mechanisms for indomethacin responsiveness are still controversial and more studies are necessary to clarify both indomethacin and new COX-2-specific NSAID action in this headache pathogenesis.

## References

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