トリプタンの選択順

現在，5種類のトリプタン(イミグラン®，ゾーミッグ®，レルパックス®，マクサルト®，アマージ®)が発売されている．剤型は錠剤のほか，種類によっては口腔内溶解錠，点鼻液，注射薬がある．

しばしば実地医家の先生方からどの薬がよいか，という質問を受けることがある．個々の薬剤は発売前の臨床試験でそれなりの成績が得られており，また個人差も明らかに存在するので一概には評価できない点もあるが，筆者は以下の考えで処方する．

基本的には，効力の弱いものから処方する．国内発売のうち1錠あたりで比較すると，弱い順にアマージ® ＜レルパックス® ＜マクサルト® ＜ゾーミッグ® ≦イミグラン® と推定されている．一般的副作用の出現頻度はほぼその逆と考えてよい．

雑誌medicinaの
One point adviceより
寺本先生の記載を添付しました。

その1

トリプタンの服用タイミングは微妙で，頭痛発作がはじまると同時に使用するのが最も有効性を引き出しやすい．少し遅れるだけで大幅に効力が低下する患者も多い．患者自身にトライアンドエラーでタイミングを選ぶように指導することも大切である．

反復服用によって効果が減弱することも少なくない．何らかの事情で薬剤を変更せざるを得ないときに，強いものから弱いものへ変更してもうまくいかないことが多い．

個人差，副作用のことを除外して考えれば，弱いものから処方をはじめることがよいだろう．特にはじめて使用する場合には，副作用などで心理的にトリプタンに拒否的になる患者を減らす意味でも重要である．

しかし発売の順が概して強い順であったため，こういったきめ細かさが広がっていないのは残念なことである．

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その2

Table 3. Selected Therapies for Acute Migraine.*

Class	Specific Treatments	Reported Mean Therapeutic Effects†	Common or Serious Adverse Effects	Comments
Triptans[26]	Almotriptan, eletriptan, frovatriptan, naratriptan, rizatriptan, sumatriptan, zolmitriptan	Pain relief by 2 hr, 16–51%; pain-free by 2 hr, 9–32%; free of headache for 24 hr, 9–27%	Chest or facial muscle tightness, lightheadedness; contraindicated in patients with coronary artery disease	Response to and side-effect profile of different triptans varies in individual patients; nasal or subcutaneous delivery may be more effective than oral delivery in patients with nausea or vomiting
Ergots[27,28]	DHE nasal spray, DHE injection	Pain relief by 2 hr, 20–40% (for DHE nasal spray; limited evidence)	Nausea, dizziness; contraindicated in patients with peripheral vascular disease or coronary artery disease	Intravenous DHE is commonly used for refractory migraine
Acetaminophen[28]		Pain relief by 2 hr, 19%; pain-free by 2 hr, 9%	Minimal with intermittent use	May be more effective in combination with antiemetic agent
NSAIDs[30]	Aspirin, diclofenac, ibuprofen, ketorolac, naproxen	Pain relief by 2 hr, 17–29%; pain-free by 2 hr, 7–20%	Gastric irritation, excessive bleeding	May be effective individually or have additive benefit when taken with triptan; different oral preparations (effervescent or powder) may have improved efficacy
Combinations[31,32]	Acetaminophen–aspirin–caffeine, sumatriptan–naproxen	Pain relief by 2 hr, 10–17% (limited evidence); pain-free by 2 hr, 20–30%	Same as with NSAIDs and triptans	Caffeine-containing preparations may have increased potential for overuse; combination therapy is more effective than individual agents in some patients
Antiemetic agents[23,29,30]	Chlorpromazine, metoclopramide, prochlorperazine	Pain relief by 2 hr with oral metoclopramide (plus aspirin or acetaminophen), 23%; pain relief by 1–2 hr with intravenous delivery in emergency department, 24–67%	Sedation, restlessness (akathisia), dystonic reactions	Phenothiazines plus metoclopramide have benefit for headache as well as nausea; ondansetron is commonly used for nausea, but evidence is lacking
Single-pulse TMS[33]	SpringTMS	Pain-free by 2 hr, 17%	No clinically significant adverse effects	Handheld device for patient-delivered therapy; currently FDA-approved for treatment of acute migraine with aura
CGRP receptor antagonists[34,35] (under investigation)	Rimegepant, ubrogepant	Pain-free by 2 hr, 14–18%	None reported; safety studies are ongoing	Phase 2 studies have been completed

* Shown are therapies that have high-quality supporting evidence or are highly recommended in guidelines from the American Headache Society,[22,23] the Canadian Headache Society,[24] and the European Federation of Neurological Societies[25] as well as other Food and Drug Administration (FDA)–approved or emerging therapies. Citations are for primary trial data within guidelines except as noted; trials were of variable quality. All approaches are FDA-approved for the treatment of acute migraine except antiemetics and calcitonin gene–related peptide (CGRP) receptor antagonists. DHE denotes dihydroergotamine, NSAIDs nonsteroidal antiinflammatory drugs, and TMS transcranial magnetic stimulation.

† Values are the percentage of patients with pain relief or freedom from pain after a single dose of the treatment minus the percentage with pain relief or freedom from pain after placebo administration. In most cases, therapy was administered when pain was already moderate or severe.

NEJMの論文から添付、薬剤の説明は省略

Table 4. Selected Preventive Therapies for Migraine.*

Class	Specific Treatments	Reported Mean Monthly Therapeutic Effects†	Common or Serious Adverse Effects	Comments
Tricyclic antidepressants[41]	Amitriptyline, nortriptyline	Data not available	Dry mouth, sedation, weight gain, urinary retention	Low doses are typically used (10 to 50 mg); may be useful in patients with insomnia
Beta-blockers[42,43]	Metoprolol, nadolol, propranolol,‡ timolol‡	Headache days, −0.4 (meta-analysis for propranolol)	Hypotension, exercise intolerance, sexual dysfunction	May be useful in patients with hypertension, tachycardia, or anxiety
Anticonvulsant agent[44]	Topiramate‡	Episodic migraine days, −1.1 to −1.3; chronic migraine days, −1.5 to −3.3	Paresthesias, weight gain, cognitive dysfunction, depression	Also used for weight loss; preparations with various half-lives are available
Anticonvulsant agent[45]	Divalproex sodium‡	Migraine days, −2.6; migraine attacks, −0.6 to −3.4	Tremor, weight gain, hair loss, fetal neural-tube defects	May be efficacious, but adverse effects limit its use
Candesartan[43]		Headache days, −0.7 to −1.7; migraine days, −0.6 to −1.1	Dizziness	Side effects are generally acceptable
Flunarizine[41]		Migraine attacks, −1.2 to −1.8	Sedation, weight gain, depression	Not available in the United States
Nonprescription therapies[46]	Coenzyme Q10, magnesium, melatonin, petasites, riboflavin	Migraine attacks: −1.1 with coenzyme Q10, −0.5 to −0.9 with magnesium, −0.8 with petasites or riboflavin	Diarrhea with magnesium	Side effects are generally acceptable, but current evidence of efficacy is poor
Botulinum toxins[47]	OnabotulinumtoxinA‡	Chronic migraine headache days, −1.4 to −2.3; migraine days, −1.5 to −2.4	Muscle weakness, headache	Delivered by subcutaneous injection at multiple sites; approved for chronic migraine only
Supraorbital nerve stimulation[48]	Cefaly device‡	Migraine days, −2.1	Local discomfort, skin irritation	Headband with forehead stimulation; applied for 20 min daily
Monoclonal antibodies targeting CGRP or its receptor[49,50] (under investigation)	Eptinezumab, erenumab, fremanezumab, galcanezumab	Episodic migraine headache days, −1.0 to −1.2; high-frequency episodic migraine days, −2.8; days with chronic migraine headache, −2.5; hr with chronic migraine headache, −30.4	Injection-site reactions; safety studies are ongoing	Multiple phase 3 trials have been completed; administered subcutaneously or intravenously every 1 to 3 mo; rapid onset of efficacy; rates of response of 75% and in some cases 100% have been reported

* Shown are therapies that have high-quality supporting evidence or are highly recommended in guidelines are from American Academy of Neurology and the American Headache Society,[39,40] the Canadian Headache Society,[41] and the European Federation of Neurological Societies[25] as well as other FDA-approved or emerging therapies. Citations for primary clinical-trial data are included in these guidelines except where noted. All studies were of episodic migraine unless otherwise specified. Episodic migraine is defined as less than 15 headache days per month; chronic migraine is defined as 15 or more headache days per month, with migraine features on at least 8 of those days.

† Values are the number of migraine attacks, or number of days or hours with symptoms, per month with the treatment minus the number with placebo; negative values indicate a benefit with the treatment. The mean monthly effect (typically after 3 months of treatment) is summarized.

‡ These therapies have been approved by the FDA as preventive therapies for migraine.

予防薬の一覧表。其れなりに効果はありそうです。

Headache triggers

Diet	Stress
Alcohol	Let-down periods
Chocolate	Times of intense activity

Aged cheeses	Loss or change (death, separation, divorce, job change)
Monosodium glutamate (MSG)	Moving
Aspartame (Nutrasweet)	Crisis
Caffeine	**Changes of environment or habits**
Nuts	Weather
Nitrites, Nitrates	Travel (crossing time zones)
Hormones	Seasons
Menses	Altitude
Ovulation	Schedule changes
Hormone replacement (progesterone)	Sleeping patterns
Sensory stimuli	Dieting
Strong light	Skipping meals
Flickering lights	Irregular physical activity
Odors	
Sounds, noise	

Graphic 68062 Version 1.0

誘発因子をuptodateより添付しました。