Patient Decision Aid
Gabapentin add-on therapy for drug-resistant focal epilepsy
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This summary is to help you talk with your doctor about using **gabapentin (Neurontin)** in addition to your current epilepsy medicine. It explains the evidence about the main benefits and risks of taking gabapentin alongside other epilepsy medicines. If your doctor recommends taking gabapentin, it is your decision whether to take it or not.

Who and what is gabapentin for?

**Gabapentin** is for people who have epilepsy, who are still having seizures, despite taking one or more epilepsy medicines. Gabapentin can be used as an add-on therapy, meaning that you take it alongside your other epilepsy medicines. The aim is to reduce or stop your seizures.

Doctors can prescribe gabapentin to treat focal-onset seizures (which start in one side of the brain) with or without secondary generalisation (when a seizure spreads to affect both sides of the brain) that are not controlled by other epilepsy medicines.

Where did we get this information?

We looked at results from six clinical trials. In total, the trials included 1206 people. All of these people had drug-resistant focal epilepsy and were between 3 and 82 years old. This Patient Decision aid is, therefore, for children and adults with drug-resistant focal epilepsy.

In these trials, people took either **gabapentin** or a fake, inactive medicine (placebo). Both groups continued to take their usual epilepsy medicine as well.

The information in this resource is current to August 2020.
What are the main benefits of using gabapentin?

It is not possible to know in advance what will happen for any individual person. But from the trial results, we found:

**Reduction in seizures**

For every 100 people with drug-resistant focal epilepsy who took gabapentin with their usual epilepsy medicine, 20 had a 50% or greater reduction in seizures, and 80 did not.

In comparison, for every 100 people with drug-resistant focal epilepsy who took a placebo with their usual epilepsy medicine, 11 had a 50% or greater reduction in seizures and 89 did not.

These numbers show that people taking gabapentin were twice as likely to have a 50% reduction in seizures as people taking a placebo.

**How confident are we that these findings are correct?**

We grade the evidence we look at. We use these grades to decide how confident we are that our findings are accurate.

We graded the evidence for 50% or greater reduction in seizures to be of moderate certainty. This means we are fairly certain that these findings are accurate.
What are the main risks of taking gabapentin?

Like any medicine, gabapentin carries a risk of side-effects (see page 4 for possible side-effects). This is what we found from the evidence.

**Withdrawing from the trials**

For every 100 people with drug-resistant focal epilepsy who took gabapentin with their usual epilepsy medicine, 11 withdrew from the trials, and 89 did not.

For every 100 people with drug-resistant focal epilepsy who took a placebo with their usual epilepsy medicine, 10 withdrew from the trials, and 90 did not.

These numbers show that people taking gabapentin were no more likely to withdraw from trials than people taking a placebo.

We did not study the reasons why people withdrew from trials. Possible reasons might include that they experienced side-effects, because the medicine did not improve their seizures, due to personal reasons, such as moving home, or other reasons.

**How confident are we that these findings are correct?**

We graded the evidence for withdrawal from treatment to be of moderate certainty. This means we are fairly confident that these findings are accurate.
What are the main side-effects of gabapentin?

It is not possible to know in advance what will happen to any individual person when they take medicine. We investigated side-effects that we know commonly affect people taking epilepsy medicine.

**Ataxia (problems with balance, co-ordination and speech)**

For every 100 people with drug-resistant focal epilepsy who took **gabapentin** with their usual epilepsy medicine, 10 experienced ataxia and 90 did not.

For every 100 people with drug-resistant focal epilepsy who took a **placebo** with their usual epilepsy medicine, 5 experienced ataxia and 95 did not.

**Dizziness**

For every 100 people with drug-resistant focal epilepsy who took **gabapentin** with their usual epilepsy medicine, 14 experienced dizziness, and 86 did not.

For every 100 people with drug-resistant focal epilepsy who took a **placebo** with their usual epilepsy medicine, 6 experienced dizziness, and 94 did not.
Drowsiness (feeling sleepy)

For every 100 people with drug-resistant focal epilepsy who took **gabapentin** with their usual epilepsy medicine, 14 experienced drowsiness, and 86 did not.

For every 100 people with drug-resistant focal epilepsy who took a **placebo** with their usual epilepsy medicine, 7 experienced drowsiness, and 93 did not.

Fatigue (feeling very tired in body and mind)

For every 100 people with drug-resistant focal epilepsy who took **gabapentin** with their usual epilepsy medicine, 7 experienced fatigue, and 93 did not.

For every 100 people with drug-resistant focal epilepsy who took a **placebo** with their usual epilepsy medicine, 4 experienced fatigue, and 96 did not.

Headache

For every 100 people with drug-resistant focal epilepsy who took **gabapentin** with their usual epilepsy medicine, 6 experienced headache, and 94 did not.

For every 100 people with drug-resistant focal epilepsy who took a **placebo** with their usual epilepsy medicine, 8 experienced headache, and 92 did not.
Nausea (feeling sick)

For every 100 people with drug-resistant focal epilepsy who took gabapentin with their usual epilepsy medicine, 7 reported nausea, and 93 did not.

For every 100 people with drug-resistant focal epilepsy who took a placebo with their usual epilepsy medicine, 7 reported nausea, and 93 did not.

These numbers show that people taking gabapentin were more likely to experience: ataxia, dizziness, fatigue, and drowsiness than people taking a placebo.

The most common side-effects experienced by people taking gabapentin with their usual epilepsy medicine were dizziness and drowsiness.
Is there any more information about side effects available?

There is more information about the possible side-effects associated with taking gabapentin on this page.

We have taken this information from the Summary of Product Characteristics* for gabapentin. This was produced by Accord-UK, the manufacturer of Neurontin, and was approved by either the European Medicines Agency (EMA).

Very common side-effects

For every 100 people taking gabapentin, more than 10 people will experience these side-effects:

- viral infection
- drowsiness (feels sleepy)
- dizziness
- ataxia (problems with balance, co-ordination and speech)
- fatigue (feeling very tired in body and mind)
- fever

Common side-effects

For every 100 people taking gabapentin, between 1 and 10 people will experience these side-effects:

- abnormal gait (changes to the way that a person normally walks)
- abnormal sensations such as numbness and tingling
- abnormal thinking (changes to the way a person normally thinks)
- accidental injury and bruising
- acne
- anorexia
- convulsions
- decreased white blood cell (immune cells) count
- dental abnormalities and inflammation of the gums
- depression, anxiety (a feeling of unease and worry) and nervousness
- diarrhoea (loose stools) and constipation (difficulty passing stools)

• difficulty breathing
• difficulty speaking (including slow or slurred speech)
• dilation of blood vessels
• dry mouth or throat
• erectile dysfunction (inability to get or maintain an erection)
• facial swelling and swelling of lower legs or hands
• fatigue (feeling very tired in body and mind)
• feeling confused
• feeling or acting hostile and unfriendly
• flu syndrome
• fracture
• headache
• hyperkinesias (excessive movements that a person can’t control such as tics and tremor)
• hypertension (high blood pressure)
• increased appetite
• increased, decreased, or absent body reflexes
• indigestion and flatulence (wind)
• infections including respiratory infections (such as the common cold, sinus infection and pneumonia), urinary tract infections and middle ear infections
• insomnia (difficulty sleeping)
• joint and muscle pain
• malaise (a general feeling of discomfort, illness, or lack of well-being)
• memory loss
• mood swings
• nausea (feeling sick) and vomiting (being sick)
• nystagmus (uncontrolled eye movement)
• rash and itch
• stomach pain
• vertigo (the sensation that you or everything around you is spinning)
• visual disturbances such as amblyopia (reduced vision in one eye) or diplopia (double vision)
• weight gain

There are also other less common side-effects. Your doctor can explain these further.
Women of child-bearing age and women planning pregnancy

Women of child-bearing potential and those planning pregnancy should discuss the effects of both epilepsy, and its treatment, on pregnancy. For women of child-bearing age who wish to take gabapentin, your doctor may wish to discuss family planning and contraception with you.

More information regarding this is available at:
www.epilepsy.org.uk/info/women

Where can I get further information?

Information about epilepsy, including seizure types and treatment, is available from Epilepsy Action at:
www.epilepsy.org.uk/info

The information in this leaflet is also available as a plain language summary from the following webpage (this link also provides information about the review authors, the review funders and any relevant declarations of interest):
www.cochrane.org/CD001415/EPILEPSY_gabapentin-add-drug-resistant-focal-epilepsy