

# Why do we feel pain?

We all feel pain in the same way, or do we? Pain is one of science's biggest mysteries, but scientists now know much more than they did ten years ago about how disease, your genes and your mind can affect how you feel pain.

A few hundred people in the world can feel no pain at all from the time they're born because they have a rare disease. A life with no pain – that would be good, wouldn't it? Well, actually no. Pain is your body's way of warning you about danger. If you feel no pain, you can hurt yourself more. So pain is useful.

But why do people sometimes feel no pain? It may be because they believe they won't. For example, during the festival of Thaipusam in Malaysia some believers enter a trance and can then put knives through parts of their body and feel no pain. Another example of this is when people have operations under hypnosis, with no anaesthetic, and still feel no pain. The patients are awake during these operations and can even talk to the doctor but seem to feel no pain. Doctors use a type of hypnosis in places where no anaesthetic is available. But it only works if you believe it.

One doctor has found a way to reduce pain. His patient had very bad burns and needed painful physiotherapy. The doctor found that if the patient played a computer game during the treatment he felt very little pain. This is because the brain can't concentrate on the game and the pain at the same time.

Situations of stress also seem to affect how you feel pain. During sporting events or in wartime, people with injuries often don't know and continue to play sport or fight. It seems that in these situations the body can stop the pain and actually make painkillers naturally.

Recent research on one family who can't feel pain is promising. They are born with a faulty gene which doesn't pass on the pain message to the brain. Doctors now know the gene responsible for this and hope to use this knowledge to find ways to relieve pain. This discovery and other progress they make in the understanding of pain could help millions of people worldwide in the future.

**1** Before reading the text, think about what would be good about feeling no pain and what could be a problem. Can you think of any ways to make pain less?

**2** Now read the text. How many of your ideas from exercise 1 are talked about in the text?

**3** Read the article again and decide if the sentences are true (T) or false (F). Circle the correct answers and correct the false sentences.

- |   |     |
|---|-----|
| 1 Many things affect how we feel pain.  | T/F |
| 2 Many people feel no pain.   | T/F |
| 3 Pain can be a good thing.   | T/F |
| 4 Some people don't feel pain because they think they won't.                    | T/F |
| 5 You can have an operation with no anaesthetic and feel no pain.               | T/F |
| 6 If you're under hypnosis during an operation, you can't talk.                 | T/F |
| 7 If you are thinking hard about something else, you may not feel the pain.     | T/F |
| 8 It's possible that one family's problem could help many people in the future. | T/F |

## 4 Match the meanings below to the following words from the text.

rare    awake    believe    painkiller    relieve    promising    faulty    discovery

- 1 a medicine that makes pain less (noun) \_\_\_\_\_
- 2 something that is found, or something new that is learned (noun) \_\_\_\_\_
- 3 probably going to be very good (adj) \_\_\_\_\_
- 4 not happening very often (adj) \_\_\_\_\_
- 5 not working correctly or made correctly (adj) \_\_\_\_\_
- 6 not sleeping (adj) \_\_\_\_\_
- 7 to make pain less (verb) \_\_\_\_\_
- 8 to think that something is true (verb) \_\_\_\_\_

## 5 Complete each sentence with one word from the text.

- 1 If you feel no pain, you can \_\_\_\_\_ yourself.
- 2 If you are under hypnosis, you can have an \_\_\_\_\_ and feel no pain.
- 3 If you concentrate on a game, your \_\_\_\_\_ can't think about the pain.
- 4 If you are playing a sport, you can sometimes have an \_\_\_\_\_ and continue to play because you don't feel the pain.
- 5 If you are born with a faulty gene, the pain message doesn't get to your \_\_\_\_\_ .

## 6 Circle the correct word partner.

- |  |                                     |
|--|-------------------------------------|
| 1 to <i>make</i> / <i>have</i> an operation      | 4 to <i>do</i> / <i>play</i> a game |
| 2 to be <i>in</i> / <i>under</i> hypnosis        | 5 <i>on</i> / <i>in</i> the world   |
| 3 to concentrate <i>in</i> / <i>on</i> something | 6 <i>do</i> / <i>make</i> progress  |

## 7 Discuss these questions with your partner(s).

- What new information did you learn from the article?
- Do you know of any similar situations where people felt no pain?
- How was life different in the past before there were painkillers?
- Do you think that learning more about pain is more important than other areas of scientific research?

## Glossary

**anaesthetic** (*noun*) - a drug or gas that doctors give to someone before a medical operation to stop them feeling pain

**concentrate** (*verb*) - to give all your attention to the thing you are doing

**disease** (*noun*) - an illness that affects people or animals, especially one that is caused by infection

**genes** (*noun*) - chemicals in a cell that carry information about the qualities passed to a living thing from its parents

**festival** (*noun*) - a day or period when there is a public holiday, often to celebrate a religious event

**hypnosis** (*noun*) - a very relaxed state in which you seem to be sleeping but can still react to someone else's suggestions

**injury** (*noun*) - physical damage done to a person or a part of their body

**mystery** (*noun*) - something that you can't understand or explain

**operation** (*noun*) - the process of cutting into someone's body for medical reasons

**physiotherapy** (*noun*) - the treatment of injuries using special physical exercises

**trance** (*noun*) - a state caused by hypnosis in which someone can move and speak but is not conscious in a normal way

**treatment** (*noun*) - the process of providing medical care

**warn** (*verb*) - to make someone know about a possible problem or danger so that they will not be hurt

**wartime** (*noun*) - a time with fighting between two or more countries with armed forces