



Dr Kenniff (CBSnews correspondent): It was 17 years ago when Pat Mooney first felt the incredible pain of trigeminal neuralgia.

Pat: It was like an electric circuit in the face.

Kenniff: Scientists describe it as the worst pain a human can feel. About 45,000 Americans suffer from the condition that causes nerves in the face to send intense pain signals to the brain for no reason.

Pat: It's like a firecracker⁽¹⁾ going off in my cheek.

Kenniff: An episode can last up to a minute and it can be sporadic, coming every day then nothing for weeks.

Pat: Giving birth to a child is extremely painful but it is nothing like this.

Kenniff: It is not clear what causes trigeminal neuralgia. For years, Pat was able to dull⁽²⁾ the pain with regular medications but eventually it started losing effect as the pain became more intense and more frequent.

One option is brain surgery where doctors go in and cut around the nerve. This machine offers a non-surgical alternative and almost sounds like science-fiction. It actually shoots laser-guided radiation through the brain. This volunteer shows us how it operates. The machine moves around the head, sending beams⁽³⁾ of radiation directly onto the trigeminal nerve.

Dr Antonio Desalles: We destroy the ability of the nerve to carry that pain directly to the brain.

Kenniff: UCLA's Doctor Antonio Desalles has seen great success with the treatment.

Dr Desalles: It stops the pain altogether⁽⁴⁾ in the great majority of the patients.

Kenniff: After undergoing the procedure, Pat hasn't had an episode in five months.

Pat: When you are pain-free, it just feels so good.

Kenniff: In a few patients the condition returns and a second procedure is needed. Pat hopes she is not one of them and is finally free of this pain.

Doctor Sean Kenniff, CBSNews.

Lexical helpline:

1. **a firecracker:** a small paper cylinder filled with an explosive
2. **dull (v):** reduce the pain so that it becomes less acute or intensely felt
3. **a beam:** a flow of radiation
4. **altogether:** entirely