



## UNDERSTANDING GLIA CELLS AND RETAINED MEMORY OF INJURY

Although not frequent, there are times when the use of Oska Pulse apparently stirs up more pain. In these cases, Oska seems to work well for the first few applications but then the original pain seems to return. If the user is prepared to push through this apparent negative response, onset of increased pain is usually resolved, and Oska Pulse will deliver a successful outcome.

### SO WHY DOES THIS HAPPEN?

Apart from opening new or clearing neurological pathways, one possibility is do with a type of brain cell called Glial (or Glia), the most abundant type of cell in the central nervous system. Glial cells are different to other cells in the brain in that they do not take part in any electrical conductivity. The primary function of Glial cells is to form a binding structure to provide support and protection for neurons in the central nervous system. Like a kind of 'glue' to hold neurons in their place and to insulate neurons from one another.

There are several different types of Glia cells, some supply oxygen and nutrients to neurons and others destroy pathogens and eliminate dead neurons. (like garbage collectors). There are in fact six different types of glial cells, but two - 'Astrocytes' and 'Microglia' - are responsible for tissue response to an injury.

Astrocytes help form the physical structure of the brain and are prevalent among myelinated nerve fibres. They have many functions and play a significant role in brain circuitry. Microglia are tiny cells that act as the brain's own immune system and activated by inflammation in the CNS.

It's these two cells that respond to 'something happening' in an old injury site. Like poking a stick at a bee's nest, they respond by sending an alarm to the central nervous system. Once the alarm is recognised as a false alarm, the glia allows normal healing to take place.

In these cases, whilst very few, our advice is to move Oska away from the injury site by 4 or 5 inches for the next three or four applications and push through this uncomfortable phase. It's a sign that Oska is trying to do its job. Persistence is the key to a successful outcome.

In our 15 years of experience in this technology, we've had very few people that just could not accept PEMF therapy.

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