Electrical signals control coordinated cell behaviours during wound healing
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There is a long history of the use of electrical stimulation in medicine. For instance the Romans used the discharge from electrical fish to treat a number of pathologies, including gout and migraine. More recently, we have become aware that many basic cell behaviours such as cell migration and cell proliferation are controlled by small electrical signals and that these signals are naturally present in the extracellular spaces during both development and regeneration.

The mechanisms underlying the generation of these signals will be explained. The key involvement of electrical signals in coordinating nerve guidance, epithelial cell migration and epithelial cell division to bring about effective wound healing also will be explained.

Background References

