

Supplementary information

Strip electrodes: a novel, effective and minimally invasive therapeutic option for correcting DNS via Electromechanical Reshaping

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Figure S1: represents the goat nose sample obtained from the abattoir. A) shows the lateral side of the nose (skin removed), B) shows the anterior side of the nose where it is cut 6 to 7 cm away from the apex region. C) shows the posterior side of the nose, D) extracted nasal septal cartilage used for the experiment.

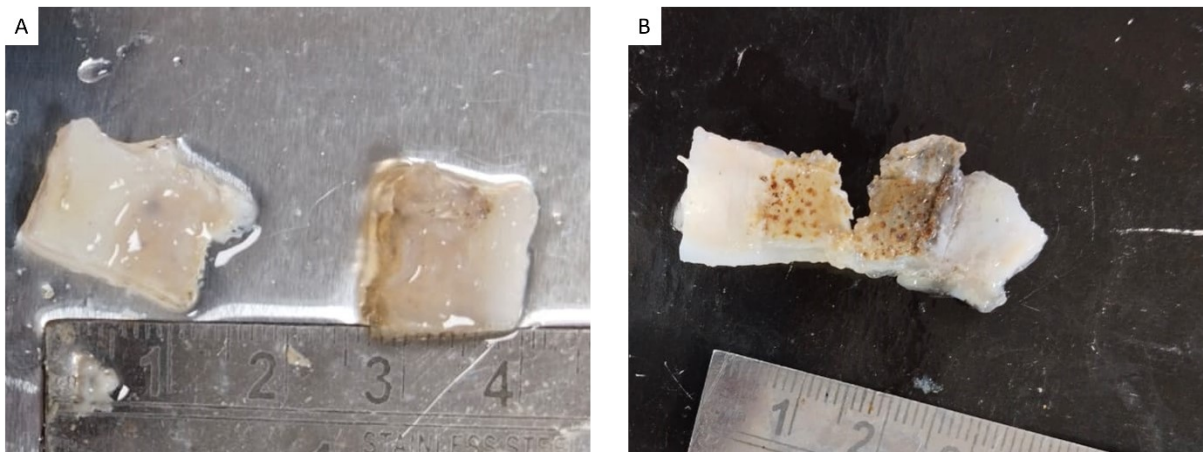


Figure S2: A) Cartilage was torn during EMR process with flat electrode configurations due to high dosimetry of 50 mA to 55 mA for 15 minutes. B) The cartilage is charred and torn when using high dosimetry in flat electrode.

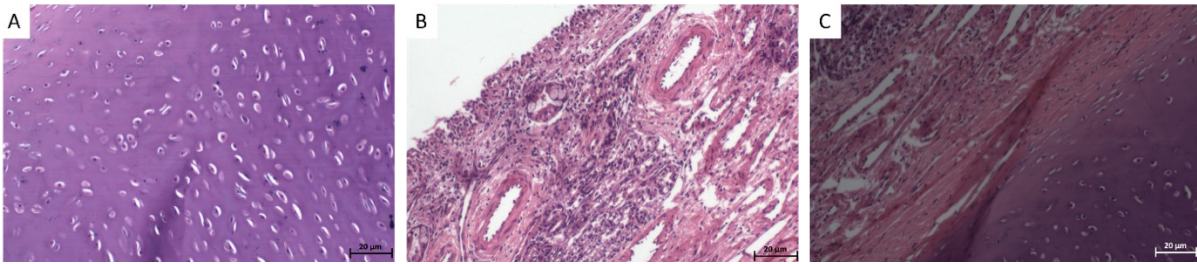


Figure S3: shows the sections of fresh control tissues stained with H&E. A) shows the normal cartilage architecture, B) shows the normal mucosa, and submucosa of nasal septum. C) shows unaltered submucosa, perichondrium, and cartilage.

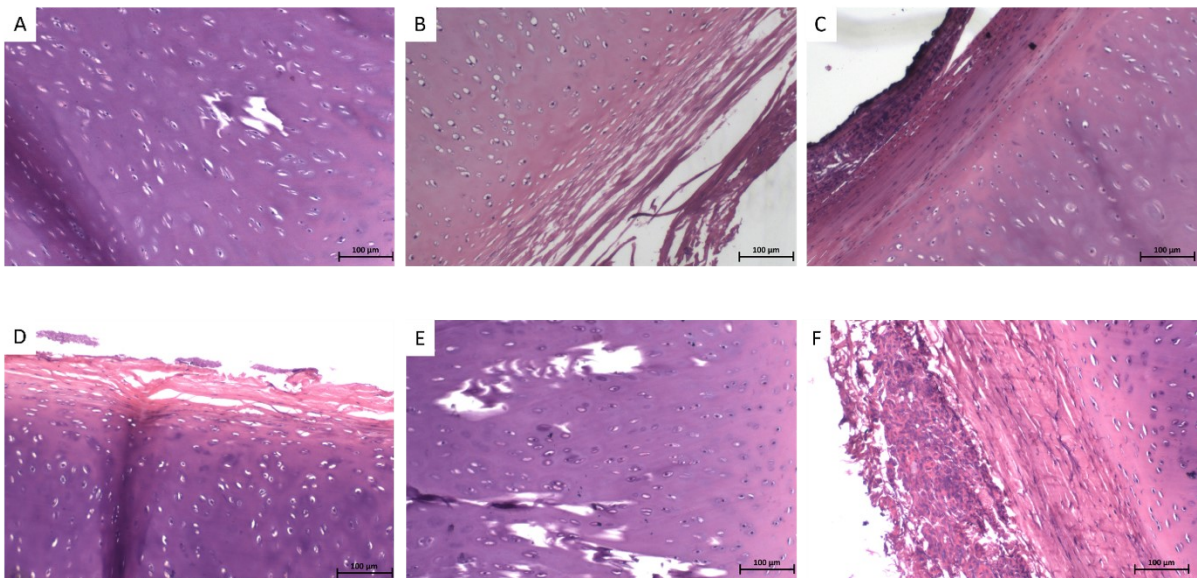


Figure S4: shows the tissues reshaped with flat electrode at 35mA for 15 minutes. A) shows the damaged cartilage, B) shows the disintegrated perichondrium. C) shows the loss of submucosal architecture. D, E, and F shows the duplicate samples of flat electrodes with 35mA dosimetry. D) shows the disintegrated perichondrium, E) shows the damaged cartilage, and, F) shows the charred and compressed mucosal and submucosal regions

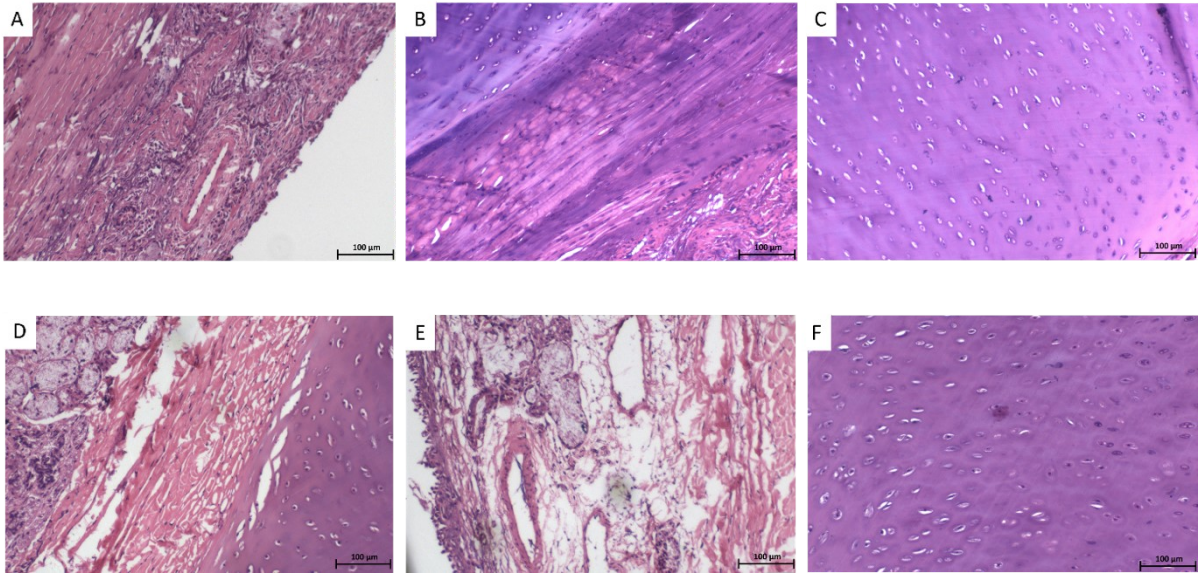


Figure S5: shows the tissues reshaped with optimized strip electrode at 25mA for 15 minutes. A) shows the normal mucosa and submucosa, B) shows the unaltered perichondrium. C) shows unremarkable cartilage architecture. D, E, and F shows the duplicate samples of strip electrodes with 20mA dosimetry. D) shows the minor disintegration of perichondrium, E) shows normal mucosa and submucosa with unremarkable blood vessels and salivary glands, and, F) normal cartilage architecture.