The results of this work provide the framework for future investigations on the effects of HIFU on the sciatic nerve of a small animal model using the ultrasound image-guided HIFU system developed in this project.

DISCUSSION, CONCLUSION & FUTURE WORK

DISCUSSION:
- Ultrasound B-mode imaging provides real-time guidance and monitoring of HIFU procedures. Consequently, both accurate targeting of volumes of interest and real-time visualization of lesion growth become feasible.
- Thermal lesion was formed exactly at the point where the neural and the chicken breast tissues meet, thereby coagulating the tissues and partially blocking the nerve, as evidenced from the nerve CAP measurements.

CONCLUSION:
- The addition of a B-mode ultrasound imaging to HIFU procedures has the capability of improving the treatments by increasing the non-invasiveness, selectiveness and localization of the HIFU therapy.

FUTURE WORK:
- The results of this work provide the framework for future in vivo and in vitro investigations on the effects of HIFU on the sciatic nerve of a small animal model using the ultrasound image-guided HIFU system developed in this project.

REFERENCES


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