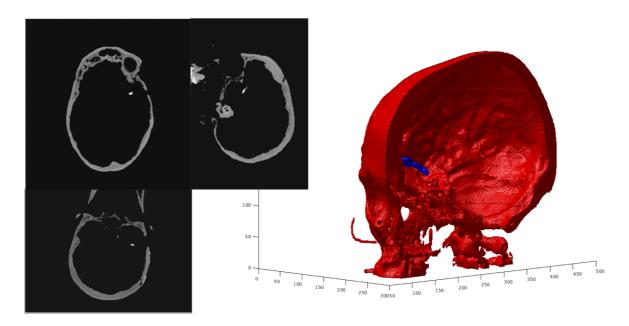
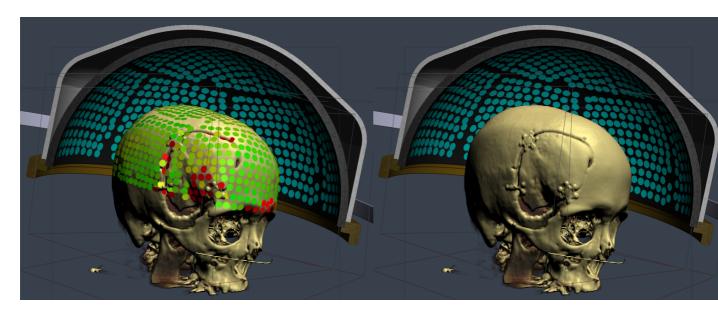
**Supplementary Table 1.** Overview of the 11 sonications. All sonications were performed using the multi-echo MRT sequence. Ax – Axial, Tran – Transverse, Cor – Coronal, Sag – Sagittal, RL – Right-Left, HF – Head-Foot, SI – Superior-Inferior, W – watts, J – Joules, s – seconds.

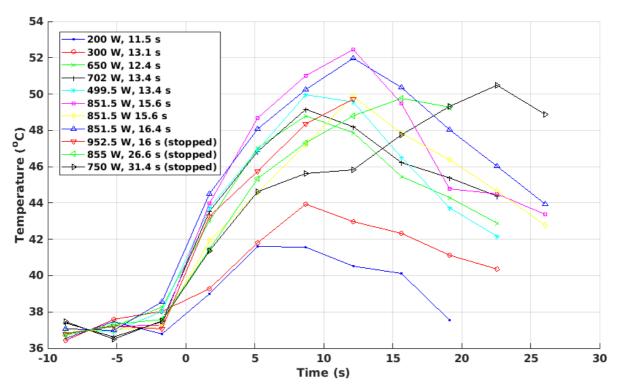
Sonication	Orientation	Phase encode direction	Power (W)	Duration (s)	Energy (J)	Max T (°C)	Average T (°C)	Sonication stopped by Patient
1	Ax (Tran)	RL	191.2	11.5	2001.7	42.0	41.6	N
2	Cor	HF (SI)	284.9	13.1	3307.9	44.6	43.9	N
3	Sag	HF (SI)	625.5	12.4	7174.1	49.7	48.8	N
4	Sag	HF (SI)	678.6	13.4	8459.6	49.7	49.2	N
5	Ax (Tran)	RL	772.1	13.4	9625	51.1	50.0	N
6	Ax (Tran)	RL	819.9	15.6	11927.9	53.0	52.5	N
7	Sag	HF (SI)	823	15.6	11970.6	50.6	49.9	N
8	Ax (Tran)	RL	826.7	16.4	12773.1	52.7	52.0	N
9	Ax (Tran)	RL	927	16	13944.7	50.3	49.7	Υ
10	Ax (Tran)	RL	832	26.6	21431.6	50.2	49.8	Υ
11	Ax (Tran)	RL	727.2	31.4	22201.6	51.0	50.5	Υ



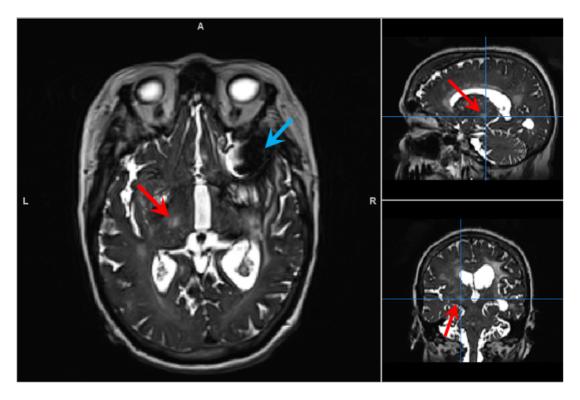
**Supplementary Figure 1.** Three orthogonal views of pre-treatment CT at the level of the aneurysm clip. Volumetric rendering of CT showing skull in red and clip in blue.



**Supplementary Figure 2.** Kranion software used to visualize the intersection of active (green) and inactive (red) transducer elements with the skull on the patient's right side. The right figure shows the volume rendering of the pre-treatment CT scan without transducer intersections overlaid. In total 861 elements were active during the treatment. [Sammartino et al. *Kranion, an open-source environment for planning transcranial focused ultrasound surgery: technical note.* J Neurosurg. 2019 Mar 1;132(4):1249-1255]



**Supplementary Figure 3.** Temperature vs. time curves averaged over the hottest 3x3 voxels for the 11 sonications, assuming a 37 °C starting temperature. The last three sonications were stopped by the patient, as indicated by the lack of cooling data.



**Supplementary Figure 4.** Axial T2 Sampling Perfection with Application optimized Contrast using different flip angle Evolution (SPACE) post treatment showing lesion as hyperintense region, red arrows. Artifact from contralateral aneurysm clip indicated by blue arrow.