Table S1. Sensation and blinding results, stratified by stimulation intensity and time window during stimulation (beginning, middle, end). The range of sensation reports was $1=$ "barely perceptible" to $10=$ "worst I could possibly stand." Data are mean $\pm$ SD.

| Sensation | Sham |  |  | Unilateral 2 mA |  |  | Bilateral 2 mA |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Beginning | Middle | End | Beginning | Middle | End | Beginning | Middle | End |
| Burn | $1.0 \pm 0.0(\mathrm{n}=1)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $2.0 \pm 1.0(\mathrm{n}=3)$ | $1.0 \pm 0.0$ ( $\mathrm{n}=1$ ) | n/a | n/a | $2.5 \pm 2.1(\mathrm{n}=2)$ | $2.0 \pm 0.0$ ( $\mathrm{n}=1$ ) | $\mathrm{n} / \mathrm{a}$ |
| Itch | $1.5 \pm 0.71(\mathrm{n}=2)$ | $2.0 \pm 0.0(\mathrm{n}=1)$ | $3.0 \pm 0.0(\mathrm{n}=1)$ | $2.0 \pm 0.0(\mathrm{n}=1)$ | $2.0 \pm 0.0(\mathrm{n}=1)$ | $2.0 \pm 0.0$ ( $\mathrm{n}=1)$ | $2.0 \pm 0.0$ ( $\mathrm{n}=1)$ | $2.0 \pm 0.0(\mathrm{n}=1)$ | $2.0 \pm 0.0$ ( $\mathrm{n}=1)$ |
| Tingle | $1.0 \pm 0.0(\mathrm{n}=1)$ | $\mathrm{n} / \mathrm{a}$ | $2.0 \pm 0.0(\mathrm{n}=1)$ | $1.75 \pm 0.5(\mathrm{n}=4)$ | $1.25 \pm 0.5(\mathrm{n}=4)$ | $1.25 \pm 0.5(\mathrm{n}=4)$ | $2.0 \pm 0.0$ ( $\mathrm{n}=1)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $2.5 \pm 2.1(\mathrm{n}=2)$ |
| Needles | $2.5 \pm 0.71(\mathrm{n}=2)$ | $2.0 \pm 0.0(\mathrm{n}=1)$ | $3.0 \pm 0.0(\mathrm{n}=1)$ | $3.5 \pm 2.1(\mathrm{n}=2)$ | $2.0 \pm 0.0$ ( $\mathrm{n}=1$ ) | $2.0 \pm 0.0$ ( $\mathrm{n}=1)$ | $3.0 \pm 0.0(\mathrm{n}=1)$ | n/a | $\mathrm{n} / \mathrm{a}$ |
| Poking | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $4.0 \pm 0.0$ ( $\mathrm{n}=1$ ) | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | n/a | $6.0 \pm 0.0(\mathrm{n}=1)$ | $\mathrm{n} / \mathrm{a}$ | n/a |
| Tickle | n/a | n/a | $\mathrm{n} / \mathrm{a}$ | n/a | $2.0 \pm 1.4(\mathrm{n}=2)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $\mathrm{n} / \mathrm{a}$ | n/a | n/a |
| Prickle | $\mathrm{n} / \mathrm{a}$ | n/a | n/a | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $4.0 \pm 0.0(\mathrm{n}=1)$ | $4.0 \pm 0.0$ ( $\mathrm{n}=1)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ |
| Blinding ( n ) | sham $=0$ | $2 \mathrm{~mA}=5$ | $4 \mathrm{~mA}=2$ | sham $=3$ | $2 \mathrm{~mA}=4$ | $4 \mathrm{~mA}=0$ | sham $=2$ | $2 \mathrm{~mA}=4$ | $4 \mathrm{~mA}=1$ |
|  |  | Unilateral 4 mA |  |  | Bilateral 4 mA |  |  |  |  |
|  | Beginning | Middle | End | Beginning | Middle | End |  |  |  |
| Burn | $2.0 \pm 1.4(\mathrm{n}=2)$ | $1.5 \pm 0.7(\mathrm{n}=2)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $3.0 \pm 1.2(\mathrm{n}=4)$ | $2.25 \pm 1.3(\mathrm{n}=4)$ | $2.0 \pm 1.0$ ( $\mathrm{n}=3$ ) |  |  |  |
| Itch | n/a | n/a | $\mathrm{n} / \mathrm{a}$ | $2.0 \pm 0.0$ ( $\mathrm{n}=1)$ | $1.0 \pm 0.0$ ( $\mathrm{n}=1$ ) | $1.0 \pm 0.0(\mathrm{n}=1)$ |  |  |  |
| Tingle | $1.5 \pm 0.7(\mathrm{n}=2)$ | $1.5 \pm 0.7(\mathrm{n}=2)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $3.0 \pm 0.0(\mathrm{n}=1)$ | $2.0 \pm 0.0(\mathrm{n}=1)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ |  |  |  |
| Needles | $4.33 \pm 2.08(\mathrm{n}=3)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $1.0 \pm 0.0(n=1)$ | $5.0 \pm 1.4(\mathrm{n}=2)$ | $3.5 \pm 0.7(\mathrm{n}=2)$ | $2 . \pm 0.0$ ( $\mathrm{n}=1)$ |  |  |  |
| Poking | $7.0 \pm 0.0$ ( $\mathrm{n}=1$ ) | $3.0 \pm 0.0(\mathrm{n}=1)$ | n/a | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ | $\mathrm{n} / \mathrm{a}$ |  |  |  |
| Tickle | $\mathrm{n} / \mathrm{a}$ | $2.0 \pm 0.0(\mathrm{n}=1)$ | n/a | n/a | n/a | $1.0 \pm 0.0$ ( $\mathrm{n}=1$ ) |  |  |  |
| Prickle | $\mathrm{n} / \mathrm{a}$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $1.0 \pm 0.0(\mathrm{n}=1)$ | $\mathrm{n} / \mathrm{a}$ | n/a | n/a |  |  |  |
| Blinding ( n ) | sham $=1$ | $2 \mathrm{~mA}=5$ | $4 \mathrm{~mA}=1$ | sham $=0$ | $2 \mathrm{~mA}=4$ | $4 \mathrm{~mA}=3$ |  |  |  |

