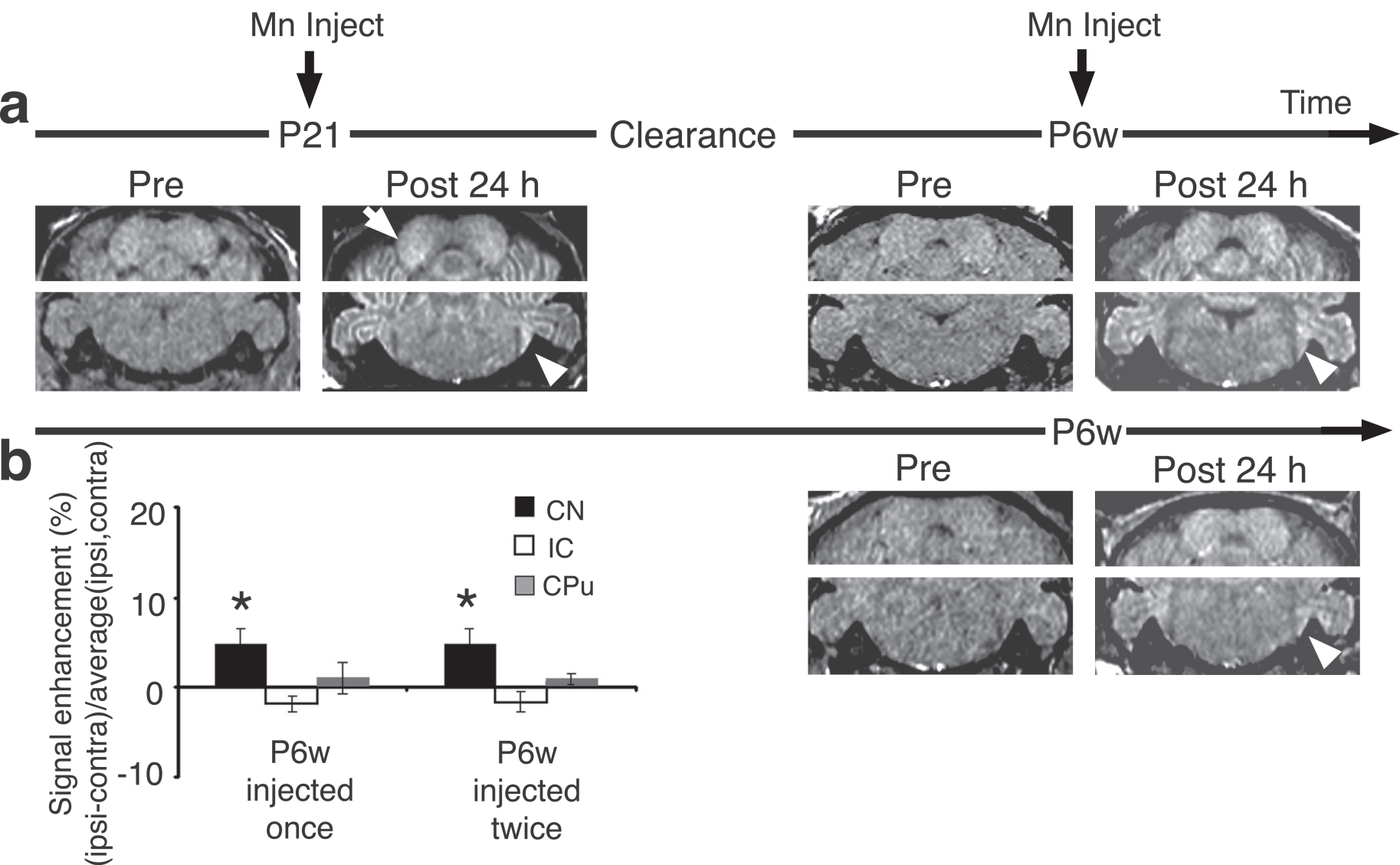


Supplementary Figure 3 MEMRI data showed Mn^{2+} -clearance to baseline and no influence of the previous MEMRI experiments after 3 weeks.



(a) Images are shown pre- and 24-h post- $MnCl_2$ injection at P21 and then at P6w in the same mouse, which experienced uni-CHL at P21 (top time line). MEMRI enhancement can be seen in the ipsi-CN (arrowhead) at both P21 and P6w, and in the contra-IC (arrow), referenced to the functional ear at P21 only. The pre-scan at P6w shows that the Mn has cleared from the previous injection at P21. Images from a second mouse, acquired pre- and 24-h post- $MnCl_2$ injection once only at P6w show similar ipsi-CN enhancement (arrowhead; bottom timeline). **(b)** Quantitative MEMRI data acquired at P6w from mice injected twice with $MnCl_2$ at P21 and P6w ($n = 7$; right) were the same as those injected only once at P6w ($n = 7$; left). In both cases, enhancement was significant (two-tail t-test) only in ipsi-CN ($*P < 0.001$) but not in contra-IC.