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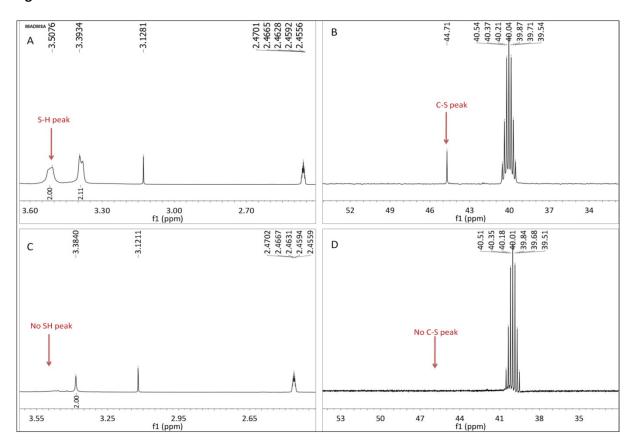


Figure 1: <sup>1</sup>H and <sup>13</sup>C NMR spectra of the free MiADMSA molecules and complexes with Cu (II); [A] <sup>1</sup>H spectra of MiADMSA; [B] <sup>13</sup>C spectra of MiADMSA; [C] <sup>1</sup>H Cu (II) /MiADMSA complexes and [D] <sup>13</sup>C spectra of Cu (II)/MiADMSA complexes recorded in  $D_2O$ .

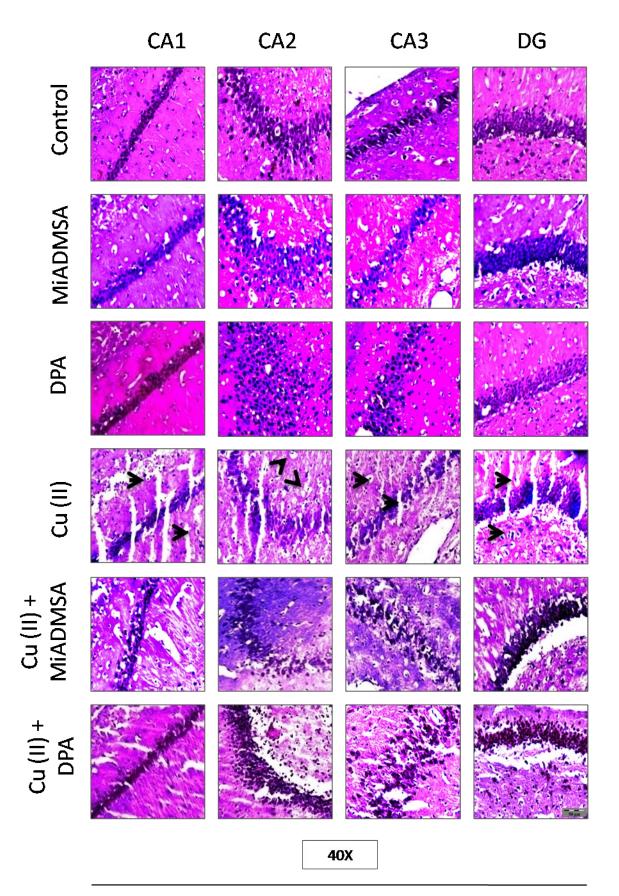


Figure 2: Representative photomicrographs from different groups showing the H&E staining of brain tissue sections. 16-weeks of Cu (II) exposure increased the level of degenerated and vacuolated neurocytes compared to the control animal. However, MiADMSA and DPA elicit slight improvements on neuronal injury in the hippocampus region upon chronic Cu (II)-exposed rats (H&E staining, x400).