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The challenge of cerebral magnetic resonance imaging in neonates: A new method using mathematical morphology for the segmentation of structures including diffuse excessive high signal intensities.

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Highlights

- New morphological method to segment neonatal brain tissues and hyperintensities
- Max-tree, a contrast invariant hierarchical representation, is used to model images
- No atlas is required and no nonlinear registration is involved
- The proposed method achieves top results on both 1.5T and 3T T2 weighted images
- A user-friendly interface integrating the complete proposed method is provided

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