1116-57-2462Rolland Trapp* (rtrapp@csusb.edu), 5500 University Pkwy, San Bernardino, CA 92407, and
John Harnois. Tangle surgeries and hyperbolic augmented links. Preliminary report.

Given two consecutive crossing circles in a fully augmented link, we define four tangle surgeries that replace them with tangles that result in generalized fully augmented links. Two of the surgeries are shown to preserve volume, while the others increase it by twice the volume of a regular ideal octahedron. It is then shown that any octahedral fully augmented link can be obtained from the Borromean rings by a sequence of these surgeries. Finally, the surgeries are generalized to describe the geometry of generalized fully augmented links that contain certain nested thrice-punctured spheres. (Received September 22, 2015)