

### Anesthetic risk: levels and causes<sup>9</sup>

MPS	Risk level	Multisystem impairment
I-H (Hurler) II (Hunter)	Very high High	<ul style="list-style-type: none"><li>• Potential obstruction of the upper airway</li><li>• Difficult intubation</li><li>• Presence of thick secretion in the airway</li><li>• Possible cardiac impairment</li><li>• Possible odontoid hypoplasia</li></ul>
I-S (Scheie) I-H/S (Hurler–Scheie)	Mildly high High	<ul style="list-style-type: none"><li>• Typical problems of I-H (I-H/S)</li><li>• Risk of postoperative apnea</li><li>• Heart disease (in particular aortic insufficiency)</li></ul>
III (Sanfilippo)	Generally not increased	
IV (Morquio) VII (Sly)	Very high	<ul style="list-style-type: none"><li>• Odontoid hypoplasia</li><li>• Difficult intubation</li><li>• Possible alteration of the rib cage</li><li>• Possible aortic insufficiency</li></ul>
VI (Maroteaux-Lamy)	High	<ul style="list-style-type: none"><li>• Cardiomyopathy</li><li>• Severe kyphoscoliosis</li><li>• Thrombocytopenia</li><li>• Possible odontoid hypoplasia</li><li>• Delayed awakening</li></ul>

Adapted from Spinello, *ISRN Anesthesiol*, 2013.