CASE PRESENTATION AND PEARLS FOR MANAGING Rosette Cataracts

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A 55-year-old patient presented with 20/400 VA 3 months after sustaining blunt trauma from a tennis ball. A star-shaped cataract was visible on examination. Phacoemulsification was performed without complications, and the patient’s postoperative BCVA was 20/30.

Cataracts that are shaped like a star are sometimes referred to as petaloid or rosette cataracts. They are typically seen in patients who present with a history of blunt or penetrating trauma. A blow to the eye can disrupt the lens fibers and generate shock waves along the line of impact, which can result in a posterior cortical rosette cataract, as observed in the Figure. Star-shaped cataracts can also be caused by electric shock or ionizing radiation.

In eyes with a star-shaped cataract, it is essential to look for zonular weakness such as phacodonesis or iridodonesis during the initial evaluation. Intraoperatively, the use of trypan blue dye can be useful. The placement of a capsular tension ring or of capsular tension segments may be indicated during cataract surgery because of their utility in eyes with mild to diffuse zonular weakness or focal zonular weakness.

During surgery, it is important to handle the anterior capsule gently to minimize stress on the zonules, and phaco parameters should be decreased if zonular weakness is evident.

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