Surgical outcome of trabeculotomy in aniridic glaucoma
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Purpose: The aim of this study is to investigate intraocular pressure (IOP) lowering effect of trabeculotomy in aniridic glaucoma.

Method: The medical records of patients that had undergone trabeculotomy in aniridic glaucoma between 2001 and 2010 at Keio University hospital, Tokyo were retrospectively reviewed. All of the patients with aniridic glaucoma that was uncontroable in medical therapy received primary trabeculotomy in the period. Successful trabeculotomy was defined that no reoperative surgery was done.

Results: Ten eyes of six patients were enrolled to this study. All of the patients had aniridia and related glaucoma in both eyes. The age of primary trabeculotomy was 15.3 years old (range: 0 to 33). In primary trabeculotomies of 10 eyes, preoperative IOP was 33.2 ± 7.8 mmHg (range: 16 to 48). In 5 eyes of 10 eyes primary trabeculotomies were successful and no secondary operation was done for six months. In 5 eyes of 10 eyes, trabeculotmy was done within postoperative six months. One eye was reoperatated sixty seven month later after the primary trabeculotmy. In one eye of six unsuccessful primary trabeculotomy eyes, IOP was not controled by two trabeculotmies, trabeculectomy was done and IOP was controled within normal limits. There were nine successful trabeculotomies including secondary surgery, these preoperative IOP was 30.7 ± 7.4 mmHg (range: 24 to 48). Postoperative IOP were 19.8 ± 5.3 mmHg (range: 12 to 29) at 1 month, 18.1 ± 2.9 mmHg (range: 14 to 22) at 2 months, 16.6 ± 5.3 mmHg (range: 8 to 26) at 3 months, 15.9 ± 3.4 mmHg (range: 10 to 19) at 6 months, 17.4 ± 4.3 mmHg (range: 10 to 21) at 1 year, and 15.4 ± 5.1 mmHg (range: 8 to 22) at 2 years. There was no serious complication in all trabeculotomies.

Conclusion: Though multiple surgery may be required, trabeculotomy for aniridic glaucoma is effective for initial or secondary surgical intervention with less serious complications.