Intraocular Pressure on Postoperative Day 1 After Femtosecond Laser-Assisted Phacoemulsification

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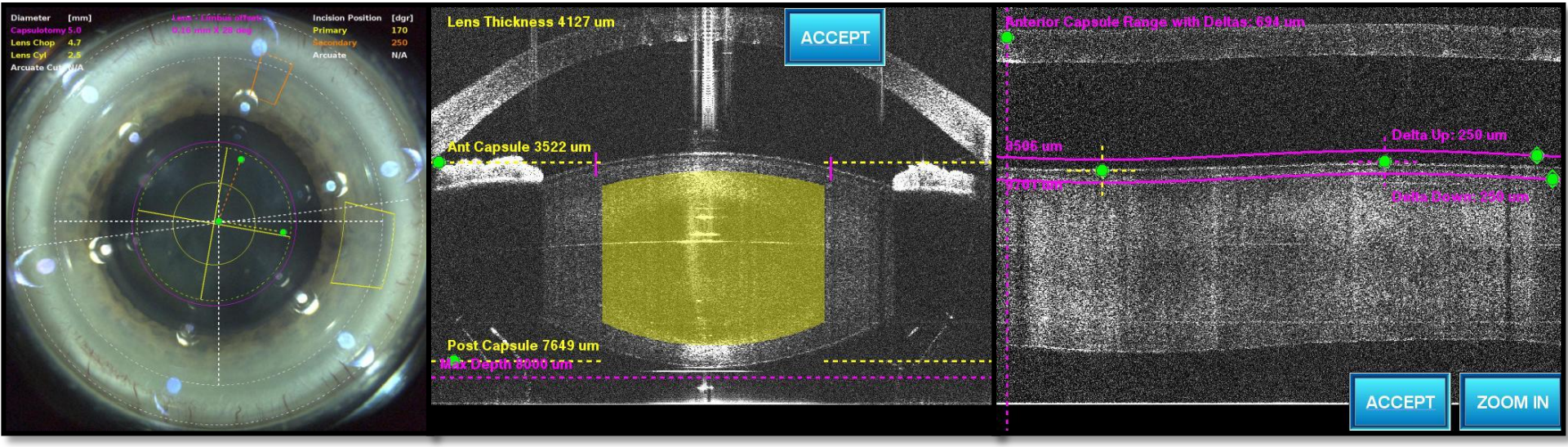
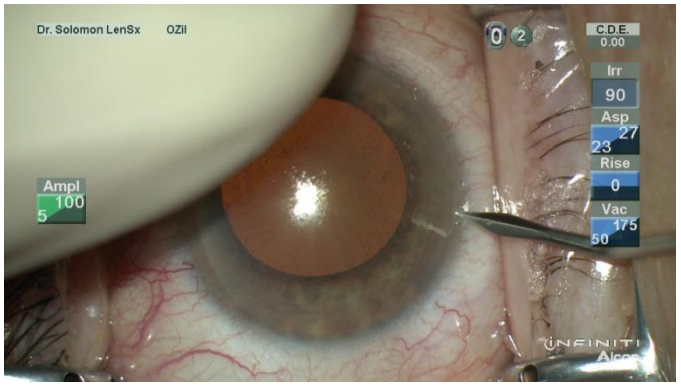
Purpose

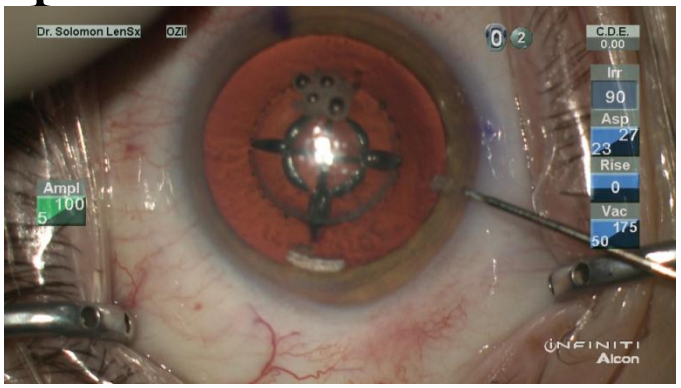
- To assess intraocular pressure (IOP) between patients undergoing femtosecond laser assisted phacoemulsification and compare it to conventional surgery on day 1 after surgery.



Methods



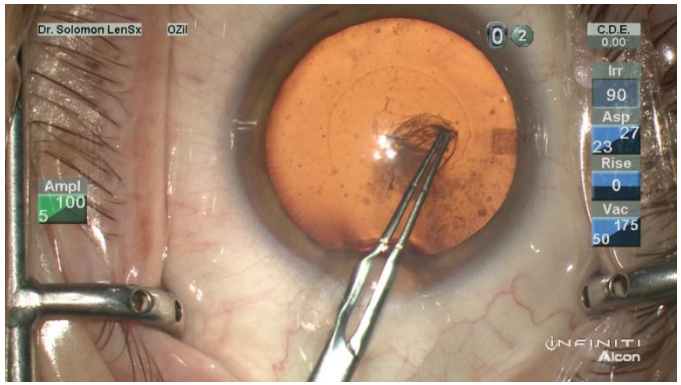
- Retrospective chart review
- Routine, uneventful phacoemulsification between August and December 2012.
- Charts were divided in two groups:
  - femtosecond laser assisted
  - conventional cataract surgery.

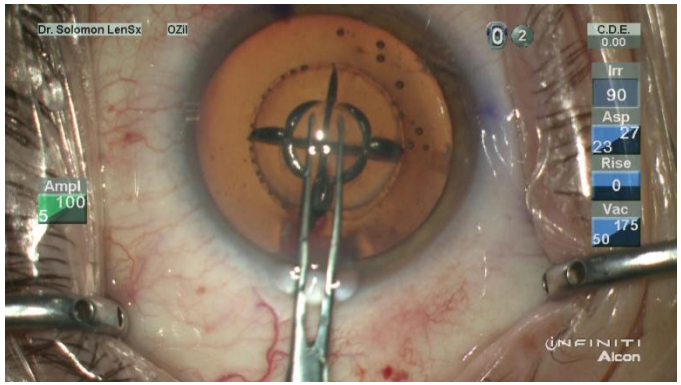


Methods

- All variables (age, preoperative and postoperative IOP) passed the normality test (Shapiro-Wilk test, $P > 0.05$)

- A $P < 0.05$ was considered statistically significant (t-test.)



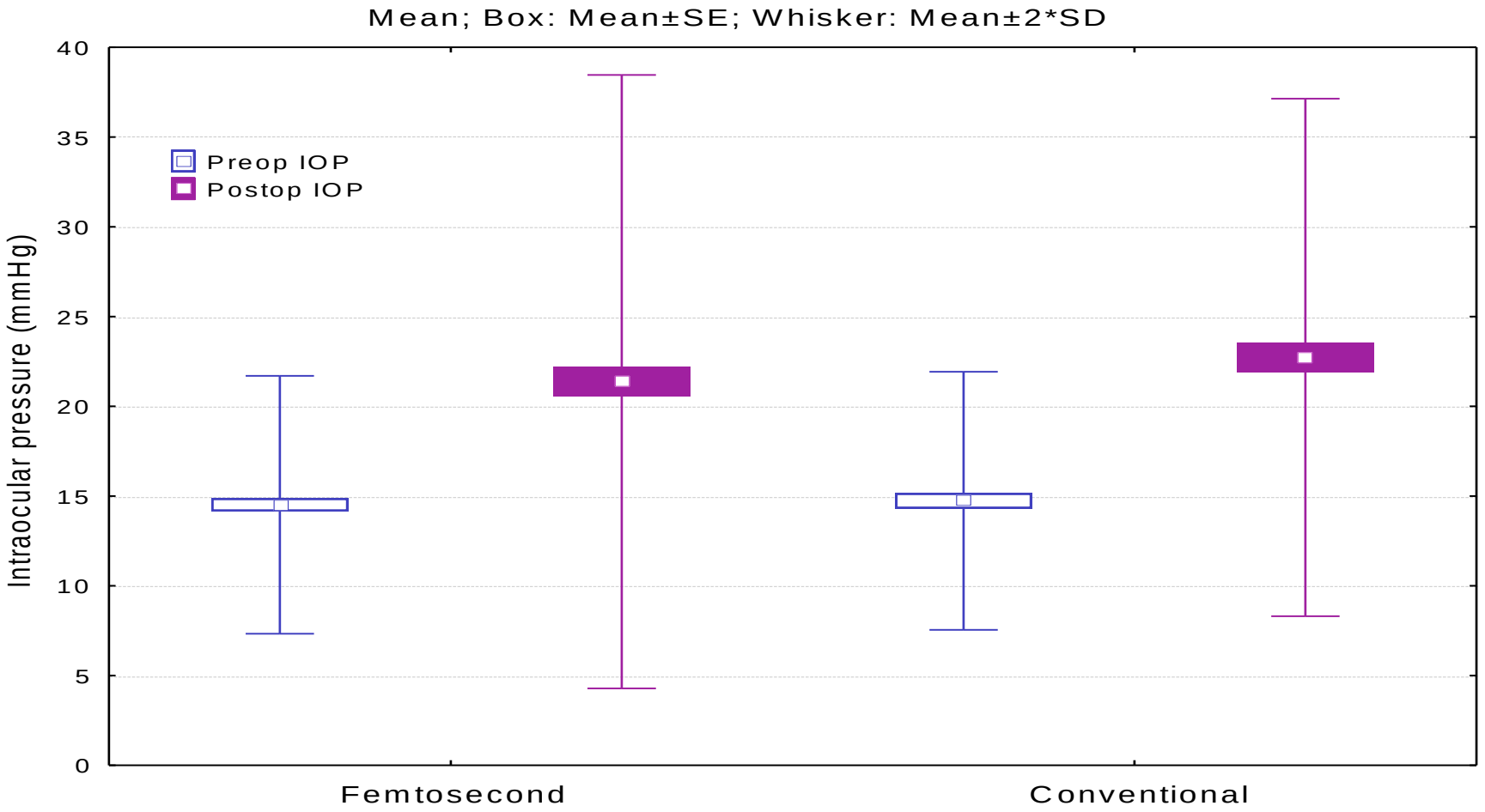


Results

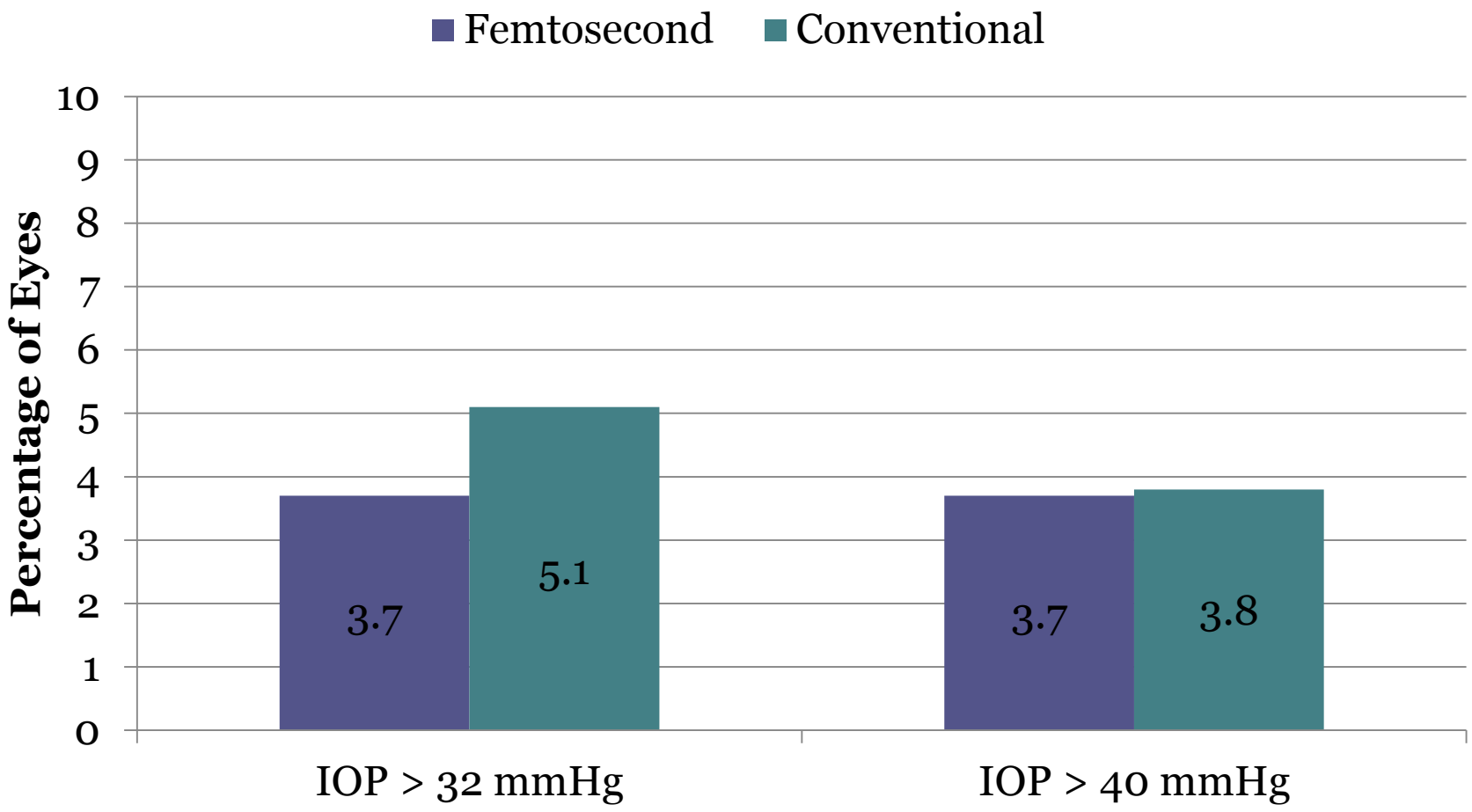
- Total of 185 eyes of 119 patients were included
  - Femtosecond assisted cataract: 107 eyes
  - Conventional phacoemulsification: 78 eyes

	Femtosecond	Conventional	*P*-value
Age (years)	68.9 ±6.1	70.6 ±7.1	.076
Preoperative IOP (mmHg)	14.5 ±3.4	14.7 ±3.6	.756

Results


Mean; Box: Mean±SE; Whisker: Mean±2*SD
Intraocular pressure (mmHg)
40
35
30
25
20
15
10
5
0
Preop IOP
Postop IOP
Femtosecond
Conventional

Results


Femtosecond
Conventional
Percentage of Eyes
10
9
8
7
6
5
4
3
2
1
0
3.7
5.1
3.7
3.8
IOP > 32 mmHg
IOP > 40 mmHg

Conclusion

- The use of femtosecond laser during routine phacoemulsification did not show an increased IOP during postoperative day 1 compared to conventional phacoemulsification.