Efficiency and Cost Effectiveness of FLACS Using a Sterile vs. Non-Sterile Single Room

Jack Chapman, MD

North Georgia Eye Associates

Gainesville, GA

ASCRS 2024



"Its not how good you are now, its how good you're going to be that really matters."

We all have untapped potential within us.

-Atul Gawande, MD



Practice Overview

Dr. Jack Chapman

Total # of Cases Per Year: 900/year

Conversion Rate FLACS w/ LenSX: 40 - 10%

Conversion Rate FLACS w/ ALLY: 75-90%

Cases Per Surgery Block: 20 cases

1 day/wk # Days Operate:





















Founded with a commitment to excellence in eye care since 1984

Study Workflow:

2 ORs/5 MDs: Nonsterile FLACS, Sterile FLACS

Q2/23 Update:

4 ORs/10 MDs: ALLY FLACS Sterile

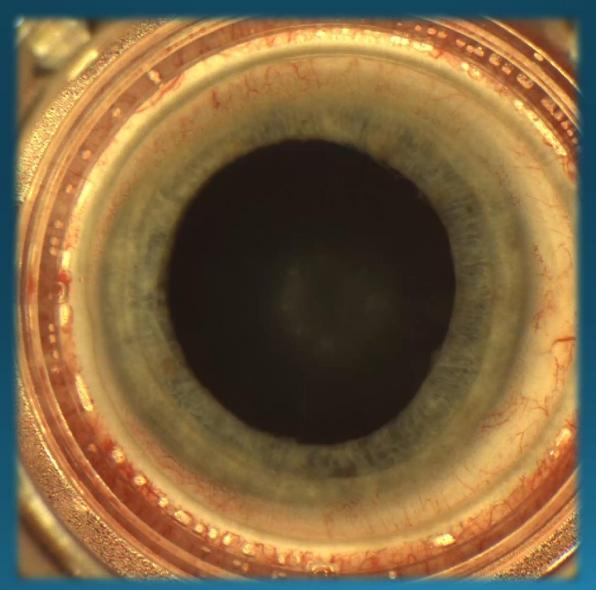


OR Sterile Set-up Sterile ALLY





ALLY in the OR



Study Design

Primary Objective:

Prospective study to evaluate the time efficiencies of two different workflow scenarios of femtosecond laser-assisted cataract surgery from the surgeon and patient perspectives

- Group 1: Sterile ALLY in OR #1
- Group 2: Non-sterile LenSx with Verion in OR #2

Primary Endpoints:

- Identification of all time and motion parameters relevant to the FLACS procedure
- 2. Measurement of all applicable time intervals for patient and surgeon
- 3. Calculation of intervals that represent time and efficiency savings
- 4. Calculate related cost savings



Methods

- Subjects at least 21 years old with an operable, uncomplicated cataract, eligible for FLACS were enrolled sequentially and randomly assigned to the LenSx or ALLY group
- This was a non-interventional, observational study with no collection of biometric data or PHI
- Study staff tracked time and motion of the patient and surgeon during the course of the procedure by using a world clock and documenting all activities with a time stamp
- To prevent bias, a third party was secured to oversee time and motion data collection
- Participation for each subject concluded at the end of their surgical procedure



Results

Time Interval		ALLY	LenSx	ALLY Time Savings	P Value
Laser set up to docking start	Ave	0:11:49	0:19:32	0:07:43	0.028
Bed adjustments, Version, etc.	SD	0:05:55	0:14:27		
	Range	0:02:12 to 0:29:34	0:02:03 to 0:44:10		
Total case time surgeon perspective Surgeon in, femto, phaco, surgeon out	Ave	0:16:11	0:19:41	0:03:30	0.002
	SD	0:02:40	0:04:23		
	Range	0:11:53 to 0:22:49	0:13:53 to 0:32:01		
Femto complete to phaco start Transition from femto to phaco Docking complete to first touch for phaco	Ave	0:01:19	0:04:39	0:03:20	<0.001
	SD	0:00:30	0:01:02		
	Range	0:00:15 to 0:02:26	0:03:08 to 0:08:52		
Surgeon wait time for draping Transition non-sterile femto to sterile phaco					
	Ave	0:00:00	0:02:11	0:02:11	<0.001

Potential Time and Cost Savings

Time Savings More Cases per Day Less Time in OR per Day More Cases Per Day Less Time in the OR Using 10 min hr time savings **Cost Savings** 1 additional case/hr 60-90 min/day savings 6 additional cases/day More Revenue Generation **OR Time Cost Savings** Ave Rev Per Case \$1150 60-90 min at \$60-\$100/min* \$6900/day \$6000-\$9000/day \$310,500/yr (45 days/yr) \$360,000 - \$405,000/yr FOR ONE SURGEON FOR ONE SURGEON

Summary

The ALLY femtosecond laser during cataract surgery in a sterile environment offers an opportunity for greater efficiency, time and cost saving in the following ways:

- Provides a surgeon 4:03 time savings per procedure (plus piece of mind!)
- Provides the staff 9:54 time savings per patient (happy staff!)
- Up to 1 more case an hour or 6 additional cases per day
- Possibility of up to \$350,000 per year for one surgeon, 45 OR days
- Less time in the OR, up to 60-90 minutes per day



Thank you

