Table 1. Baseline characteristics and surgical outcomes of patients who underwent subretinal injection of tissue plasminogen activator for submacular hemorrhage due to retinal arterial macroaneurysm rupture

Number of cases	48
Age (years)	80.6 ± 8.6
Sex (male/female)	10/38
Preoperative BCVA (logMAR) (Snellen equivalent visual acuity)	1.24 ± 0.53 (20/348)
Postoperative BCVA (logMAR) at 1 month (Snellen equivalent visual acuity)	0.80 ± 0.42 (20/126)
Postoperative BCVA (logMAR) at 6 months (Snellen equivalent visual acuity)	0.66 ± 0.50 (20/91)
Postoperative CRT at 6 months (μm)	140.9 ± 62.9
Development of MH [number of eyes (%)]	10 (20.8)

BCVA = best corrected visual acuity, logMAR = logarithm of the minimum angle of resolution,

CRT = central retinal thickness, MH = macular hole

Data are presented as mean ± standard deviation unless otherwise indicated.

Table 2. Comparison of the characteristics and surgical outcomes of patients who underwent subretinal injection of tissue plasminogen activator for submacular hemorrhage due to retinal arterial macroaneurysm rupture, based on the presence or absence of intraretinal hemorrhage/macular hole

	IRH(+)MH(+) (n=10)	IRH(+)MH(−) (n=23)	IRH(-)MH(−) (n=15)	P-value
Age (years)	79.4 ± 8.6	80.0 ± 9.9	82.3 ± 6.8	0.648[†]
Sex (male/female)	3/7	6/17	1/14	0.257[*]
Days from diagnosis to surgery (days)	2.6 ± 1.9	2.7 ± 3.6	2.7 ± 4.0	0.997[†]
Intraoperative photocoagulation for RAM [number of eyes (%)]	1 (10.0)	3 (13.0)	3 (20.0)	0.754[*]
Type of gas (air / 20%SF6)	3/7	9/14	7/8	0.704[*]
Preoperative BCVA (logMAR) (Snellen equivalent visual acuity)	1.16 ± 0.33 (20/289)	1.36 ± 0.53 (20/458)	1.12 ± 0.63 (20/264)	0.342[†]
Postoperative BCVA (logMAR) at 1 month (Snellen equivalent visual acuity)	0.92 ± 0.22 (20/166)	1.01 ± 0.36 (20/205)	0.42 ± 0.34 (20/53)	<0.001[†]
Postoperative BCVA (logMAR) at 6 months (Snellen equivalent visual acuity)	0.91 ± 0.41 (20/163)	0.87 ± 0.45 (20/148)	0.18 ± 0.21 (20/30)	<0.001[†]
Postoperative CRT at 6 months (μm)	99.5 ± 46.0	130.9 ± 77.3	174.3 ± 32.9	0.001[†]
Postoperative ELM status at 6 months (continuous/discontinuous)	1/9	4/19	12/3	<0.001[*]
Postoperative EZ status at 6 months (continuous/discontinuous)	0/10	1/22	7/8	0.001[*]

Fluffy sign [number of eyes (%)]	5 (50.0)	17 (73.9)	0 (0)	<0.001[*]

IRH = intraretinal hemorrhage, MH = macular hole, BCVA = best corrected visual acuity, logMAR = logarithm of the minimum angle of resolution, CRT = central retinal thickness, ELM = external limiting membrane, EZ = Ellipsoid Zone

Data are presented as mean ± standard deviation unless otherwise indicated.

$P < 0.05$ was considered statistically significant.

[†]One-way ANOVA

[*]Pearson's chi-square test

Table 3. Multiple regression analysis of the postoperative best-corrected visual acuity at 6 months and clinical characteristics of patients with submacular hemorrhage due to retinal arterial macroaneurysm rupture

	Model 1		Model 2	
	Regression coefficient (95% CI)	P-value	Regression coefficient (95% CI)	P-value
IRH (+) MH (+) vs. IRH (−) MH (−)	0.730 (0.426 to 1.034)	<0.001	0.799 (0.511 to 1.087)	<0.001
IRH (+) MH (−) vs. IRH (−) MH (−)	0.695 (0.448 to 0.942)	<0.001	0.711 (0.472 to 0.950)	<0.001
Age			0.013 (0.001 to 0.025)	0.037
Sex (female vs. male)			0.167 (−0.084 to 0.418)	0.201
Preoperative BCVA			0.194 (0.000 to 0.388)	0.055

IRH = intraretinal hemorrhage, MH = macular hole, BCVA = best-corrected visual acuity, CI = confidence interval