

CORNEA AND ANTERIOR SEGMENT

Pterygium Recurrence in a Private Eye Clinic in Abuja

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Background: The major concern following pterygium surgery is recurrence. The study aims to compare the recurrence rate between 5-fluorouracil and conjunctival autograft and the risk factors for recurrence.

Methods: This was a retrospective study carried out in Rachel Eye Center, Abuja, over a 5-year period. The clinical records were obtained from the operation and patients case notes. Information retrieved included demographic characteristics, type of surgery, recurrence and duration of recurrence. Data was analysed using the

descriptive, compare means and logistic regression analysis functions of SPSS version 20 Chicago, IL, USA.

Results: A total of 57 pterygium surgeries were carried out accounting for 8.8% of the total surgeries done over the period. The mean age of the participants was 47.47 years and there were 44 males (77.2%) and 13 females (22.8%). Pterygium recurrence was seen in 19 cases (33.3%). The mean duration of recurrence i.e., the average time between the surgery and onset of recurrence noticed in the clinical notes was 11.5 weeks. Thirty five percent of those that had excision with 5FU and 28.6% of those that had excision with conjunctival autograft had recurrence (p=0.664). The risk factors for recurrence were age below 50 years. There was a 5 times greater risk of those younger than 50 to have pterygium recurrence [OR 5.25; 95% CI (1.45 - 19.0) p=0.012]. Thirty four percent of males as compared to 30.8% females had recurrence (p=0.823). There was a 2 times greater risk of

Table 1: Comparison of recurrence rates with demographic and clinical characteristics (N=57 eyes)

Variable	Recurrence Frequency(%)	No Recurrence Frequency(%)	Total	OR (95% CI)	P value
Age					
Less than 50	15(50)	15(50)	30	5.25 (1.45-19.0)	0.012
Greater than 50	4(16)	21(84)	25		
Sex					
Males	15(34.1)	29(65.9)	44	1.16(0.31-4.41)	0.823
Females	4(30.8)	9(69.2)	13		
Type of pterygium					
Secondary	2(50)	2(50)	4	2.12(0.27-16.34)	0.472
Primary	17(32.1)	36(67.9)	53		
Type of surgery					
5FU	15(34.9)	28(65.1)	43	1.34(0.36-5.00)	0.664
Conjunctival autograft	4(28.6)	10(71.4)	14		
Surgeon					
Senior	7(31.8)	15(68.2)	22	0.89(0.287-2.78)	0.848
Junior	12(34.3)	23(65.7)	35		

those with secondary pterygium to have recurrence [OR 2.12; 95% CI (0.27 - 16.34) p=0.472].

Discussion: We observed that slightly fewer recurrences occurred amongst those that had excision with conjunctival autograft (EWCA) as compared with excision with 5FU (EW5FU). We are encouraged to do more cases of (EWCA) although this method takes longer time of surgery and may require suture removal afterwards.

There have been high rates of recurrence using 5FU as compared to other adjuncts. Onwasigwe et al¹ in University of Nigeria Teaching Hospital reported 52% recurrence following EW5FU and much lower recurrence of 13.6% seen with mitomycin C, Onnebune et al² in University College Hospital, Ibadan reported a recurrence of 47.4% with EW5FU, they also observed a tremendously lower recurrence of 9.6% when excision was combined with 5FU and conjunctival autograft. This means we should combine both methods for a much more favorable outcome. Bekibele et al³ in a randomized clinical trial reported 5 FU was found to be marginally superior to excision with autograft and not statistically significant.

We found those younger than 50, males and those with secondary pterygium tend to have more recurrences and recommend conjunctival autograft or combined adjuncts for these patients. Olusanya et al⁴ also reported a 5.6 times greater risk of those younger than 50 years as compared

to those older and males had a higher recurrence than females.

Conclusion: Pterygium Excision with conjunctival autograft was found to be slightly more successful than pterygium excision with 5FU. People younger than 50 years were found to have a 5 times greater risk of recurrence as compared to those older patients.

Keywords: Pterygium; Recurrence; 5 fluorouracil; Conjunctival autograft; Risk factors

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