Assessing the frequency and duration of post-injection discomfort in patients receiving anti-VEGF injections: A quality improvement project

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Purpose:
Despite the frequency of intravitreal injections, there are comparatively few data on patients’ post injection experience. To address this, we administered a prospective patient quality improvement survey to capture data on patients’ typical experience following an injection.

Methods:
Subjects receiving intravitreal injections at the Byers Eye Institute (BEI) or Associated Retina Consultants were asked if they would be willing to complete a brief questionnaire. The questionnaire was administered by study personnel in real time and no protected health information was collected. Data collected included sex, age, average number of injections received, occurrence of post-injection discomfort, typical pain level, and time to return to baseline functioning. Due to COVID-19, the study was paused after approximately 10 days of recruitment.

Results:
A total of 104 subjects (53% male; age 75.1 ± 12.4 years) participated in the survey, of which 93 were seen at BEI. A total of 70.2% (73/104) reported usually experiencing discomfort after injections, and 86.5% (90/104) had experienced discomfort at least once following their injections. Approximately 60% reported taking the injection day off from normal activities to rest their eye. Of the 90 subjects who reported experiencing post-injection discomfort, typical pain 6 hours post injection was rated as mild (1-3/10) in 51.1%, moderate (4-7/10) in 38.9%, and severe (8-10/10) in 11.1%. Twenty-nine percent reported experiencing severe post injection pain (8-10/10) at least once. Pain resolved within 1-2 days in 83.3%, while 7.7% reported having discomfort last between 3-7 days. The most frequent methods used to reduce post injection pain included extra rinsing post injection (46.6%) and artificial tears (31.1%). Post-injection pain was not significantly associated with the total number of intravitreal injections a subject had received (p = 0.44), and 16.6% of subjects reported that post-injection pain affected their decision to continue receiving injections.

Conclusions:
Post-injection discomfort and pain is common following intravitreal injections, with over 50% of subjects surveyed reporting taking their injection day off to recover and over 42% needing 1-7 days to completely return to baseline. Strategies to reduce post-injection discomfort may help improve treatment compliance in a subset of patients.