



# Decoding the Digital Discourse: A Thematic and Sentiment Analysis of Reddit Posts on Eyelid Surgery



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## Introduction

- Eyelid surgery is among the most commonly performed aesthetic and functional procedures, yet structured outcome measures may miss **unprompted concerns** increasingly voiced on social media.
- Reddit's anonymous, discussion-based format captures **candid patient motivations, fears, and recovery narratives** that shape expectations before consultation.
- We analyzed public Reddit posts and comments to characterize **emotions, terminology use, and recurring psychosocial themes** relevant to preoperative counseling and shared decision-making.
- **Objective:** Characterize patient emotions, concerns, motivations, and communication patterns in Reddit discussions about eyelid surgery.

## References

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Relevant to the educational content, I have no financial relationships with ineligible companies to disclose.  
Off-label use: Not applicable.

## Methods

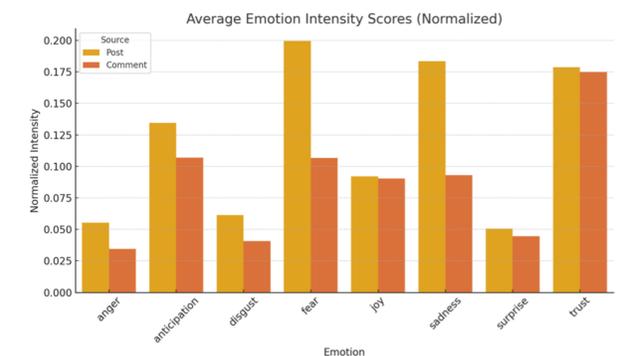
- **Study design:** Cross-sectional mixed-methods analysis of public Reddit discussions (no interaction with users).
- **Data source & timeframe:** English-language posts and top-level comments from 8 subreddits, May 12, 2024–May 12, 2025.
- **Subreddits:** r/PlasticSurgery, r/AskDocs, r/HoodedEyes, r/Ophthalmology, r/TwoXChromosomes, r/SkincareAddiction, r/30PlusSkinCare, r/EyeTriage.
- **Inclusion/Exclusion:** Included posts with  $\geq 1$  eyelid keyword and  $\geq 10$  characters of user text; excluded bot/moderator, deleted/removed, non-text-only, duplicates/cross-posts.
- **Sampling of comments:** Up to 5 top-ranked top-level comments per eligible post; nested replies excluded.
- **Natural language processing:** Sentiment polarity and discrete emotions assigned to each post/comment using a transformer-based classifier; emotion triangulation using the NRC Emotion Lexicon; Computed post–comment concordance vs discordance in sentiment.
- **Sociolinguistics:** Lexical richness, readability, and medical terminology density using a curated list of 100 oculoplastics terms.
- **Qualitative analysis:** Inductive thematic analysis of a random sample of 500 entries
- **Ethics:** Public, pseudonymous content; minimized traceability; IRB exempt.

## Results

- **Dataset:** 1,579 posts and 4,014 comments
- **Sentiment polarity differed between posts vs comments:**
  - Posts: 53.3% negative, 12.1% positive (remainder neutral)
  - Comments: 57.8% positive, 18.2% negative (remainder neutral).
- **Post–comment mismatch was common:** 50.8% of post–comment pairs were discordant, most commonly negative post  $\rightarrow$  positive comment, consistent with peer reassurance/support.
- **Emotion patterns:** Posts showed higher fear and sadness; comments showed higher trust and anticipation (see Figure to the right).
- **Medical terminology was frequent but often imprecise:** Mean 2.58 technical terms per post; common confusion between “ptosis,” “hooded eyes,” and “dermatochalasis.”

## Results — Key Themes

1. Psychosocial impact & self-perception (e.g., photo-salient asymmetry distress)
2. Preoperative anxiety and decisional ambivalence
3. Postoperative disappointment/regret despite “acceptable” outcomes
4. Surgeon selection & communication mismatch (social proof > credentials)
5. Nonsurgical/DIY experimentation (products, tapes, cosmetic injectables)
6. Functional vs aesthetic goals (often intertwined; aesthetics frequently foregrounded)
7. Peer reassurance/normalization in comments
8. Cost and insurance uncertainty as barriers
9. Terminology confusion & diagnostic uncertainty (ptosis vs dermatochalasis vs hooding)



## Conclusions

- Reddit discourse reveals patients who are **clinically literate** yet **diagnostically uncertain**, with success judged **by culturally inflected, photo-salient aesthetics** and reinforced **by peer reassurance**.
- Practical counseling opportunities include: **early vocabulary alignment** (ptosis vs dermatochalasis vs hooding), explicit discussion of **asymmetry/variability**, and ethically transparent **digital education** to counter skewed social media norms.