

Google Search Analysis: what do people want to know about regional anesthesia and where do they find the answers?

Background

- 93% of Americans are online in 2023¹ and Google has become the most utilized search engine in the world.²
- A review found that 52% of patients used the internet to acquire information before their elective procedures.³
- We aimed to identify the questions patients had about regional anesthesia and from where people acquired this information.

Methods

- We analyzed data from Google (www.google.com) using a search engine optimizer Ahrefs (www.ahrefs.com) to identify the most commonly used search terms about regional anesthesia.
- We limited data collected to the United States.
- We used search volume per month to determine popularity.
- We searched terms “nerve block”, “regional anesthesia” “neuraxial” “epidural” to extract online queries
- We entered the same search terms into searchresponse.io to extract PAA questions from Google.
- The top 10 queries and PAAs were included in our search results. The most used websites for each of the top search queries were also recorded and organized by type.

Results

Figure 1: Top 10 Google search queries including the terms: regional anesthesia, nerve block, neuraxial, epidural

Top 10 queries	Volume per month	Top Website
Epidural	92,000	https://www.nhs.uk
What is an epidural	14000	https://www.nhs.uk
Nerve block	8300	https://www.hopkinsmedicine.org
How long does an epidural last	8100	https://myhealth.alberta.ca
Occipital nerve block	5500	https://my.clevelandclinic.org
Nerve block injection	4100	https://my.clevelandclinic.org
What is in an epidural	3100	https://www.yalemedicine.org
What is a nerve block	2500	https://www.hopkinsmedicine.org
Regional anesthesia	2300	https://www.bcm.edu
How long does a nerve block last	1400	http://anesthesiology.wustl.edu

Figure 2: Top 10 People also asked questions with volume metrics

PAA questions	Volume per month
How long does a nerve block last?	450
What are the four types of nerve blocks?	200
Do they put you to sleep for a nerve block?	200
What is local vs. regional anesthesia?	150
Is an epidural a nerve block??	100
How long does rebound pain after a nerve block last?	50
What drugs are used for regional anesthesia?	20
Is an epidural regional anesthesia?	20
Are you awake during regional anesthesia?	10
What is the difference between regional and epidural anesthesia?	10

Discussion

- The overall search volume was low even for the top 10 searches which may indicate patients are generally not informed about the possibility of regional anesthesia or they are already educated on the topic.
- Compared to “general anesthesia” (102,000 searches) searches for the term “nerve block” was only conducted 8300 times a month.
- The most searched term was “epidural,” which is unsurprising as it is well known to the public due to common use for labor analgesia.
- Although limiting to searches conducted within the United States, not all of the top websites were from the United States.
- Of the United States based top websites, all were affiliated with academic medical centers with anesthesia residency programs.
- None of the top websites were from national anesthesia based societies.

References

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