



## PATIENT PERCEPTION AND PREFERENCES OF REGIONAL ANAESTHESIA

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**ABSTRACT** **Introduction** Regional anaesthesia (RA) is becoming popular because of its safety and advantages. Patients prefer general anaesthesia (GA) at first due to misconceptions henceforth it is essential to explore the patient's knowledge on RA. **Aims:** To investigate whether age, gender, education level & history of previous surgery could affect knowledge & preferences in RA. To determine whether there is any change in attitude of patients towards RA post-effective education and reassurance of safety on RA. **Methods** observational, single centered, cross sectional study conducted over 1 month period at FMMCH after approval from the institutional ethics committee on patients undergoing elective surgery under RA which included ASA I/II, aged between 18-80 years post obtaining informed consent. It was a questionnaire based study filled during pre-anaesthetic checkup **Results** average age of the sample was 50.32±14.33 years. Of 62 participants, 56.5% were males, 43.5% of the patients had graduate level of education, 51.6% had at least one surgery in the past, 45.2% knew what was meant by RA, 41.9% & had been administered RA before. **Discussion:** The results showed that females needed more reassurance and effective counseling since they were more concerned with backache following regional anaesthetic intervention. **Conclusion:** Knowing patients' concerns is essential for the anaesthesiologist to address their needs. Anaesthesiologists should work on improving general population perspective and knowledge about RA.

**KEYWORDS :** Perception, Preference, Regional anaesthesia

## INTRODUCTION

Regional anaesthesia is becoming more and more popular on a global scale because of its improved safety and a number of advantages. Patients frequently choose general anaesthesia at first due to misconceptions and beliefs rather than advice from an anaesthesiologist<sup>1</sup>. As patient refusal is an absolute contraindication for regional anaesthesia, many patients do not benefit from this technique. It is essential to explore the patient's knowledge on regional anaesthesia because only anaesthesiologists can treat and educate the patient to the best of their ability by acknowledging the patient's concerns<sup>2,3</sup>.

## AIMS AND OBJECTIVES

To determine the patients knowledge and preferences in regional anaesthesia. To investigate whether age, gender, education level, and history of surgery could affect knowledge and preferences in regional anaesthesia. To determine whether there is any change in attitude of patients towards regional anaesthesia post effective education and reassurance of safety on regional anaesthesia

## METHODS

This was an observational, single centred, cross sectional study conducted over a 1 month period at Father Muller Medical College Hospital after obtaining approval from the institutional ethics committee on patients undergoing elective surgery under RA. Patients fulfilling ASA Classes I and II, aged between 18 and 80 years, surgery scheduled under RA were included in the study after obtaining informed consent. Patients refusal, patients with communication problems & history of a psychiatric disorder, ASA III and IV, and pregnant patients were excluded from the study.

Our study used a reliable and well-structured questionnaire which had two parts. Part 1 contained demographic characteristics and part 2 contained questions on perception and preference of RA. The patients were given sufficient time to fill up the questionnaire during PAC.

This questionnaire was translated to the regional language and was validated through a pilot study on twenty patients. Based on the pilot study findings, it was observed that 20% of the patients knew what was meant by RA. Considering expected proportion of 20%, and 10% margin of error at desired confidence level of 95%, sample size was calculated to be 62.

The collected data was analysed using SPSS version 20.0 by frequency & percentage. All categorical data were compared for statistical significance using Chi-square test. Statistical significance was set at P<0.05.

## Table 1 Patient Demographics

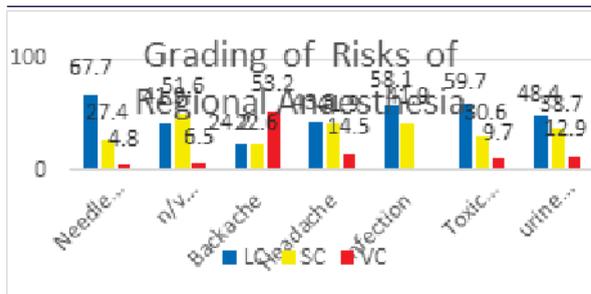
Patients Characteristics	Count n=62	Column N %
1. Age	18-40	16 25.8%
	40-60	28 45.2%
	>60	18 29.0%
2. GENDER	Female	27 43.5%
	Male	35 56.5%
3. Level of Education	7th Std	9 14.5%
	10th Std	16 25.8%
	12th Std	10 16.1%
	Graduate	27 43.5%
4. Have you undergone any surgeries in the past?	None	30 48.4%
	One	18 29.0%
	>2	14 22.6%
5. Native Language	KANNADA	48 77.4%
	KONKANI	13 21.0%
	TULU	1 1.6%

Table 2 Patients perceptions and Preferences on Regional Anaesthesia

Patients Perceptions & Preferences to Regional Anaesthesia	Count n=62	Column N %
1. Do you know what is meant by RA?	NO 34 54.8%	YES 28 45.2%
2. Have you been administered RA before?	NO 38 61.3%	YES 28 41.9%
3. In your opinion is RA Painful?	DONT KNOW 22 35.5%	NO 33 53.2%
4. Do you want to know possible risks of RA?	YES 7 11.3%	NO 4 6.3%
i) It feels prick at regional site (Least Concerned- LC) (Somewhat Concerned- SC) (Very Much Concerned - VC)	LC 42 67.7%	SC 17 27.4%
	VC 3 4.8%	
ii) Damage to the nerve (Least Concerned- LC) (Somewhat Concerned- SC) (Very Much Concerned - VC)	LC 26 41.9%	SC 32 51.6%
	VC 4 6.3%	
iii) Backache (Least Concerned- LC) (Somewhat Concerned- SC) (Very Much Concerned - VC)	LC 15 24.2%	SC 14 22.6%
	VC 33 53.2%	
iv) Headache (Least Concerned- LC) (Somewhat Concerned- SC) (Very Much Concerned - VC)	LC 27 43.5%	SC 26 41.9%
	VC 9 14.5%	
v) Infection (Least Concerned- LC) (Somewhat Concerned- SC) (Very Much Concerned - VC)	LC 36 58.1%	SC 26 41.9%
	VC 0 0%	
vi) Toxic Reaction to the drug (Least Concerned- LC) (Somewhat Concerned- SC) (Very Much Concerned - VC)	LC 37 59.7%	SC 19 30.6%
	VC 6 9.7%	
vii) Not able to pass urine (Least Concerned- LC) (Somewhat Concerned- SC) (Very Much Concerned - VC)	LC 30 48.4%	SC 24 38.7%
	VC 8 12.9%	
5. Do you want to know the benefits of RA?	NO 4 6.5%	YES 58 93.5%
i) Decreased PONV	ADVANTAGE 62 100.0%	
ii) Being awake during the surgery	ADVANTAGE 46 74.2%	NO ADVANTAGE 16 25.8%
iii) Having less pain post Surgery	ADVANTAGE 62 100.0%	
iv) Early Ambulation	ADVANTAGE 62 100.0%	
v) Cost effective	ADVANTAGE 62 100.0%	
vi) Decreased stay in PACU	ADVANTAGE 62 100.0%	
6. If fit candidate you would prefer RA	NO 6 9.7%	YES 56 90.3%
7. After knowing all the risks and benefits of RA, would you prefer RA over GA?	NO 8 12.9%	YES 54 87.1%

## RESULTS

The average age of the sample was 50.32 ± 14.33 years. Out of 62 participants, 56.5% were males. The majority of the patients had graduate level of education 43.5%. Analysing previous experience with anaesthesia showed that 51.6% had at least one surgery in the past. Regarding the knowledge of RA, 45.2% knew what was meant by RA and 41.9% had been administered RA before. It was found that concern for backache was statistically significantly more among females than males. It was found that 70.4% of females were very concerned about backache as against 40% of males (P = 0.022).



**DISCUSSION**

The results showed that females needed more reassurance and effective counselling since they were more concerned with backache following regional anaesthetic intervention although backpain after spinal anaesthesia is almost exclusively associated with pre-existing back pain. There was change in attitude in majority of patients who were exposed to RA for the first time post effective education and reassurance of safety of RA of but it was statistically not significant. Majority of males preferred RA and RA over GA though not statistically significant. The results showed correlation between gender and past surgery with respect to knowledge & preference to regional anaesthesia.

**CONCLUSION**

Knowing patients' concerns is essential for the anaesthesiologist to address their needs. Henceforth anaesthesiologists should work on improving general population perspective and knowledge about RA.

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