BC WOMEN'S HOSPITAL+ HEALTH CENTRE
Provincial Health Services Authority

DEPARTMENT OF ANESTHESIA

Identifying barriers to performing sphenopalatine ganglion block and developing an institutional block kit

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RATIONALE

Sphenopalatine ganglion block (SPGb) is a useful form of analgesia for PDPH where EBP is contraindicated.

HYPOTHESIS

Interest in SPGb exists but lack of experience, knowledge or equipment prevent its use.

AIM

Design a quality improvement project to identify and address barriers to SPGb use at BC Women's Hospital.

1. **REVIEW:** efficacy and safety literature, block methods, current equipment availability
2. **INTERVIEW:** Informed consent, then 1:1 interviews of anesthesiolgists assessing baseline SPGb experience. Record self-reported knowledge, skills, and interest. Identify barriers to SPGb use.
3. **ASSESS:** Competence by simulated SPGb on a mannequin
4. **DEVELOP:** A block kit and information card
5. **EDUCATE:** Focused session to introduce new resources
6. **RE-EVALUATE:** anesthesiologist knowledge, skill, interest Gather feedback on block kit and protocols

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RESULTS – 18 INTERVIEWS

Experience: 5 to 47 years of anesthesia experience

SPGb experience: 10/18 (55%) had never performed SPGb

Interest: 13/18 (72%) wanted to learn more about SPGb

Efficacy: 16/18 (88%) were unsure of efficacy rate for PDPH

KNOWLEDGE, SKILL, INTEREST
Self-reported score 0-10
0=lowest, 10=highest

Domain	Knowledge	Skill	Interest
Median	**4.5**	**4**	**6.5**
IQR	3.25-5.75	1.25-5.75	3.5-7.75

BARRIERS
Interviewee rating 0-10
0=unimportant, 10=most important

D	Efficacy	Safety	Skill	Consensus	Infection	Equipment
M	**7**	**6.5**	**5**	**3.5**	**3**	**1**
IQ	3.25-8	5-8.75	2-9	1-5.75	2-3	1-5.5

COMPETENCY
Simulated SPGb, scored out of 34
Individual observed skills 0-2 each
0=not observed, 2=skilled behaviour

D	Consent	Preparation	Administration	Postprocedure	Total
M	**100%**	**50%**	**90%**	**33%**	**65%**
IQ	66-100%	50-60%	80-100%	33-50%	60-76%

KEY BARRIERS

EFFICACY Recipe card includes summary of published literature

SAFETY Introduction of standardised protocol allows familiarity and repeatability

SKILL Education session and recipe card teaches a simple block method

BLOCK KIT

RECIPE CARD

NEXT STEPS

Repeat one-to-one interviews

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Introduce block kit and educate at interview

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Reassess knowledge, skill, and interest ratings after block kit in use