

Title	The analgesic efficacy of ultrasound-guided transversus abdominis plane block with mid-axillary approach after gynecologic laparoscopic surgery : A randomized controlled trial
Author(s)	川原, 玲子
Citation	大阪大学, 2015, 博士論文
Version Type	
URL	https://hdl.handle.net/11094/55823
rights	
Note	やむを得ない事由があると学位審査研究科が承認したため、全文に代えてその内容の要約を公開しています。全文のご利用をご希望の場合は、 https://www.library.osaka-u.ac.jp/thesis/#closed 大阪大学の博士論文について https://www.library.osaka-u.ac.jp/thesis/#closed をご参照ください。

Osaka University Knowledge Archive : OUKA

<https://ir.library.osaka-u.ac.jp/>

Osaka University

論文内容の要旨

Synopsis of Thesis

氏名 Name	川原 玲子
論文題名 Title	The analgesic efficacy of ultrasound-guided transversus abdominis plane block with mid-axillary approach after gynecologic laparoscopic surgery: A randomized controlled trial (超音波ガイド下後方アプローチ腹横筋膜面ブロックの婦人科腹腔鏡手術の術後鎮痛効果の前方視的検討)
論文内容の要旨	
[Purpose]	
<p>The transversus abdominis plane (TAP) block is widely used in clinical practice as a part of the multimodal analgesic regimen after abdominal surgery. The analgesic efficacy of ultrasound (US)-guided TAP block with the mid- axillary approach was investigated in patients undergoing laparoscopic gynecologic surgery in a randomized controlled clinical trial.</p>	
[Methods]	
<p>Adult patients ($n = 119$) undergoing laparoscopic gynecologic surgery were randomized to undergo either TAP block with ropivacaine (Group A, $n = 60$) or that with saline (Group B, $n = 59$), in a blinded manner. Following general anesthesia, TAP block was performed bilaterally by infusion of either 20-mL 0.375% ropivacaine/one side in Group A or 20-mL saline/one side in Group B, under US guidance with a mid-axillary approach. Patient-controlled analgesia (PCA) was performed postoperatively with tramadol. The analgesic effect was postoperatively evaluated using a four-grade pain score and the prince Henry pain scale (PHS) at 0, 6, 12, and 24 h. Postoperative tramadol PCA consumption and vomiting/nausea were recorded. Statistical analyses were performed using the Mann-Whitney U-test or Fisher's exact probability test. A $P < 0.05$ was considered significant.</p>	
[Results]	
<p>There was no statistically significant difference in background characteristics. The dose of remifentanyl was significantly higher in Group B ($P = 0.01$). The pain score ($P = 0.02$) and PHS ($P = 0.01$) were significantly lower in Group A at 0 h. Tramadol PCA consumption in the period of 0-6 h ($P = 0.01$) and postoperative nausea ($P = 0.04$) were significantly less in Group A.</p>	
[Conclusion]	
<p>Postoperative pain/nausea and PCA consumption were significantly lower in patients with TAP block in the early postoperative stage. TAP block with a mid-axillary approach holds considerable promise as a part of a balanced postoperative analgesic regimen following laparoscopic gynecologic surgery.</p>	

論文審査の結果の要旨及び担当者

(申請者氏名) 川原 玲子

	(職)	氏名
論文審査担当者	主査	大阪大学教授 藤野裕士
	副査	大阪大学教授 木村正
	副査	大阪大学教授 土岐裕一郎

論文審査の結果の要旨

術後疼痛軽減、早期離床、早期経口摂取の促進により、術後回復力向上、合併症減少、入院期間短縮が得られる。しかし硬膜外鎮痛は抗凝固剤普及により困難例が増加し、腹横筋膜面ブロック (TAP block) が活用されるようになった。

婦人科腹腔鏡手術の術後鎮痛における超音波ガイド下後方アプローチTAP blockの意義を明らかにするため本研究を行った。対象は全身麻酔下に婦人科腹腔鏡下手術を受けた119例で、無作為に2群に分けTAP blockを局所麻酔薬と生理食塩水で施行し、退室時、手術6、12、24hr後の疼痛スコア、術後鎮痛薬の使用量、術後24時間の嘔気・嘔吐を調査した。

局所麻酔薬群はコントロール群に比べて術中麻酔使用量が減少し、疼痛スコアは退室時で低かった。術後鎮痛薬使用量は術後0-6時間で少なく、術後の嘔気も少なかった。超音波ガイド下後方TAP blockは婦人科腹腔鏡下手術の術後鎮痛に有用であることを示しており、学位に値すると考える。