The Royal Australian and New Zealand College of Obstetricians and Gynaecologists
Excellence in Women's Health

Driving after abdominal surgery including caesarean section

This statement has been developed and reviewed by the Women's Health Committee and approved by the RANZCOG Board and Council.

A list of Women's Health Committee Members can be found in Appendix A.

The committee acknowledges the contribution of Dr Antonia Shand to this document.

Disclosure statements have been received from all members of this committee and contributors.

Disclaimer This information is intended to provide general advice to practitioners. This information should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient. This document reflects emerging clinical and scientific advances as of the date issued and is subject to change. The document has been prepared having regard to general circumstances.

First endorsed by RANZCOG: November 2012
Current: November 2015
Review due: November 2018

Objectives: To provide advice on driving post operatively following abdominal surgery including caesarean section.

Outcomes: Improved women's health after surgery.

Target audience: All health practitioners conducting abdominal surgery, or caring for women after surgery, and patients.

Values: The evidence was reviewed by the Women's Health Committee (RANZCOG), and applied to local factors relating to Australia and New Zealand.

Background: This statement was first developed by Women's Health Committee in November 2012 and reviewed in November 2015.

Funding: The development and review of this statement was funded by RANZCOG.

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1. Patient summary

The ability to drive a car following abdominal operations such as caesarean section is important for women. In general, it may take between two and six weeks before most women are ready to resume driving a private vehicle. Safety of the woman and any passengers is of paramount importance. Women need to be able to sit comfortably, work the controls, wear a seatbelt, look over their shoulder, make an emergency stop, and should not be using any medication or analgesics that cause sedation. Before attempting to drive, women should check their relevant insurance status. Considerations may be different for women driving commercial vehicles.

2. Summary of recommendations

Recommendation 1	Grade
Women should be advised to assess whether they can comfortably sit in the car, work the controls, wear a seatbelt, look over their shoulder, make an emergency stop, and be free from the effects of sedating medications when considering resuming driving after surgery.	Consensus based recommendation
Recommendation 2	**Grade**
Women should be advised that the period of recovery after surgery is variable. In general, it may take 2-6 weeks before women are ready to resume driving after abdominal surgery. The recommendations for commercial vehicle drivers may be different.	Consensus based recommendation
Recommendation 3	**Grade**
Insurance companies are generally guided by medical advice regarding driving. Women should enquire from their insurance companies whether there are any policy exclusions.	Consensus based recommendation

3. Introduction

Women are given a wide range of advice about resuming driving after surgery, including avoiding driving for long periods of time.[1,2] The pattern of recovery after abdominal surgery including caesarean delivery can be highly variable between individuals, and depends on many factors. A review has yielded limited evidence, and because of this, there are no universal guidelines to advise when women may recommence driving after abdominal surgery including caesarean delivery or abdominal hysterectomy.

4. Discussion and recommendations

4.1. What factors should women take into account when considering resuming driving after surgery?

The ability to brake in an emergency and perform unexpected manoeuvres is essential to safe driving, and this ability may be compromised by pain and or reduced freedom of movement. Fatigue and the influence of sedating medications are also important considerations when considering returning to driving. Other medical conditions, type of surgical incision/ surgery, operative complications, driving experience and ability, length of trips, and type of vehicle may also influence driving capacity. Women should be advised to assess whether they can comfortably sit in the car, work the controls, make an emergency stop, wear a seatbelt and look over their shoulder, when considering resuming driving after surgery. A seat belt must be worn at all times whether driver or passenger.

Recommendation 1	Grade
Women should be advised to assess whether they can comfortably sit in the car, work the controls, wear a seatbelt, look over their shoulder, make an emergency stop, and be free from the effects of sedating medications and be aware of the effects of fatigue, when considering resuming driving after surgery.	Consensus based recommendation

4.2. When can a woman resume driving a car after surgery?

A small study utilising a driving simulator post caesarean section has found no difference in women's driving capacity between early driving (2-3 weeks) compared to later driving (5-6 weeks). [3] A consensus statement from the Netherlands concluded that women can resume moderate activities including driving, after abdominal surgery such as abdominal hysterectomy, at 3-4 weeks after surgery.[4] In general, it may take 2-6 weeks before women are ready to resume driving after abdominal surgery such as caesarean section. However some women may be ready sooner, or later than this. A Canadian study showed that women had a lower rate of motor vehicle accidents in the year after childbirth, compared to pre-pregnancy or in pregnancy.[5] However, in the year following a birth, women may be driving less often, and for shorter time periods, so this data should be interpreted with caution. There may be benefits to early resumption of activities of daily living after surgery.[6]

Recommendation 2	Grade
Women should be advised that the period of recovery after surgery is variable. In general, it may take 2-6 weeks before women are ready to resume driving after abdominal surgery. The recommendations for commercial vehicle drivers may be different.	Consensus based recommendation

4.3. What are the insurance implications of driving after surgery?

It is recommended that patients direct enquiries to their insurance company regarding any policy requirements or exclusions relating to driving after abdominal surgery including caesarean delivery. However, in general, insurance companies surveyed in Australia stated that all women would be fully insured after caesarean section if they were given medical clearance to drive.[1] A review of the medical and legal implications of driving after surgery in the United Kingdom discussed that if the patient followed the doctor's advice, felt safe to drive and then drove in a reasonable way, he/she would be covered by insurance.[7]

Recommendation 3	Grade
Insurance companies are generally reliant on medical advice regarding fitness to drive, rather than giving advice about readiness to drive. Women should enquire from their insurance companies whether there are any policy exclusions.	Consensus based recommendation

Further information about assessing fitness to drive in Australia and New Zealand can be found by consulting the guidelines. [8,9]

5. Conclusion

The pattern of recovery after surgery is variable. Women and their clinicians should consider a number of factors when considering resumption of driving after abdominal surgery including caesarean delivery.

6. References

1. Sedgley J, Rickard K, Morris J. A survey of women and health providers about information regarding the timing of driving a car after experiencing a caesarean section. *The Australian & New Zealand journal of obstetrics & gynaecology* 2012; 52(4): 361-5.
2. Shand AW ML, Lainchbury A, Harpham M, Leung S, Nassar N. Driving a car after surgery- a survey of Australian midwives and Australian and New Zealand obstetricians' knowledge, advice and attitudes about women driving post caesarean section and gynaecological abdominal surgery. *BJOG : an international journal of obstetrics and gynaecology* 2015; Press Supplement.
3. Harpham M SA, Lainchbury A, Nassar N, Leung S. Maternal car driving capacity after birth: a feasibility study randomising postnatal women after caesarean section and vaginal delivery to early or late driving in a driving simulator. *BJOG: An International Journal of Obstetrics & Gynaecology* 2015; 122(S2): 353.
4. Vonk Noordegraaf A, Huirne JA, Brolmann HA, van Mechelen W, Anema JR. Multidisciplinary convalescence recommendations after gynaecological surgery: a modified Delphi method among experts. *BJOG : an international journal of obstetrics and gynaecology* 2011; 118(13): 1557-67.
5. Redelmeier DA, May SC, Thiruchelvam D, Barrett JF. Pregnancy and risk of a traffic crash. *CMAJ* 2014; 186(15): 1169.
6. Vonk Noordegraaf A, Anema JR, van Mechelen W, et al. A personalised eHealth programme reduces the duration until return to work after gynaecological surgery: results of a multicentre randomised trial. *BJOG : an international journal of obstetrics and gynaecology* 2014; 121(9): 1127-36.
7. Giddins GE HA. "Doctor, when can I drive?": a medical and legal view of the implications of advice on driving after injury or operation. *Injury* 1996; 27(7): 495-7.
8. Austroads, National Transport Commission. Assessing fitness to drive for commercial and private vehicle drivers: medical standards for licensing and clinical management guidelines. Austroads Publication No AP-G56-13; 2012.
9. New Zealand Transport Agency. Medical aspects of fitness to drive. A guide for medical practitioners 2009.

7. Other suggested reading

Assessing fitness to drive for commercial and private vehicle drivers: Medical standards for licensing and clinical management guidelines. Austroads and National Transport Commission. March 2012. Available at: https://www.onlinepublications.austroads.com.au/items/AP-G56-13

Sedgley J, Rickard K, Morris J. ANZJOG Survey of women and health providers about information regarding the timing of driving a car after experiencing a caesarean section. Australian and New Zealand Journal of Obstetrics and Gynaecology 2012. DOI: 10.1111/j.1479-828X.2012.01435.

8. Links to other College statements

Evidence-based Medicine, Obstetrics and Gynaecology (C-Gen 15)

9. Patient information

A range of RANZCOG Patient Information Pamphlets can be ordered via:
https://www.ranzcog.edu.au/Womens-Health/Patient-Information-Guides/Patient-Information-Pamphlets

Appendices

Appendix A Women's Health Committee Membership

Name	Position on Committee
Professor Stephen Robson	Chair and Board Member
Dr James Harvey	Deputy Chair and Councillor
Associate Professor Anusch Yazdani	Member and Councillor
Associate Professor Ian Pettigrew	Member and Councillor
Dr Ian Page	Member and Councillor
Professor Yee Leung	Member of EAC Committee
Professor Sue Walker	General Member
Dr Lisa Hui	General Member
Dr Joseph Sgroi	General Member
Dr Marilyn Clarke	General Member
Dr Donald Clark	General Member
Associate Professor Janet Vaughan	General Member
Dr Benjamin Bopp	General Member
Associate Professor Kirsten Black	General Member
Dr Jacqueline Boyle	Chair of the ATSIWHC
Dr Martin Byrne	GPOAC representative
Ms Catherine Whitby	Community representative
Ms Sherryn Elworthy	Midwifery representative
Dr Nicola Denton	Trainee representative

Appendix B Overview of the development and review process for this statement

i. Steps in developing and updating this statement

This statement was originally developed in November 2012 and was most recently reviewed in November 2015. The Women's Health Committee carried out the following steps in reviewing this statement:

- Declarations of interest were sought from all members prior to reviewing this statement.
- Structured clinical questions were developed and agreed upon.
- An updated literature search to answer the clinical questions was undertaken.
- At the November 2015 face-to-face committee meeting, the existing consensus-based recommendations were reviewed and updated (where appropriate) based on the available body of evidence and clinical expertise. Recommendations were graded as set out below in Appendix B part iii)

ii. Declaration of interest process and management

Declaring interests is essential in order to prevent any potential conflict between the private interests of members, and their duties as part of the Women's Health Committee.

A declaration of interest form specific to guidelines and statements was developed by RANZCOG and approved by the RANZCOG Board in September 2012. The Women's Health Committee members were required to declare their relevant interests in writing on this form prior to participating in the review of this statement.

Members were required to update their information as soon as they become aware of any changes to their interests and there was also a standing agenda item at each meeting where declarations of interest were called for and recorded as part of the meeting minutes.

There were no significant real or perceived conflicts of interest that required management during the process of updating this statement.

iii. Grading of recommendations

Each recommendation in this College statement is given an overall grade as per the table below, based on the National Health and Medical Research Council (NHMRC) Levels of Evidence and Grades of Recommendations for Developers of Guidelines. Where no robust evidence was available but there was sufficient consensus within the Women's Health Committee, consensus-based recommendations were developed or existing ones updated and are identifiable as such. Consensus-based recommendations were agreed to by the entire committee. Good Practice Notes are highlighted throughout and provide practical guidance to facilitate implementation. These were also developed through consensus of the entire committee.

Recommendation category		Description
Evidence-based	A	Body of evidence can be trusted to guide practice
	B	Body of evidence can be trusted to guide practice in most situations
	C	Body of evidence provides some support for recommendation(s) but care should be taken in its application
	D	The body of evidence is weak and the recommendation must be applied with caution
Consensus-based		Recommendation based on clinical opinion and expertise as insufficient evidence available
Good Practice Note		Practical advice and information based on clinical opinion and expertise

Appendix C Full Disclaimer

This information is intended to provide general advice to practitioners, and should not be relied on as a substitute for proper assessment with respect to the particular circumstances of each case and the needs of any patient.

This information has been prepared having regard to general circumstances. It is the responsibility of each practitioner to have regard to the particular circumstances of each case. Clinical management should be responsive to the needs of the individual patient and the particular circumstances of each case.

This information has been prepared having regard to the information available at the time of its preparation, and each practitioner should have regard to relevant information, research or material which may have been published or become available subsequently.

Whilst the College endeavours to ensure that information is accurate and current at the time of preparation, it takes no responsibility for matters arising from changed circumstances or information or material that may have become subsequently available.