

Discussing opportunistic salpingectomy with patients during primary care

May 22nd, 2025

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Michael Smith Foundation for
Health Research



Canadian Cancer Society Société canadienne du cancer

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 **OVCARE**
BC'S OVARIAN CANCER RESEARCH TEAM

VGH+ UBC hospital foundation

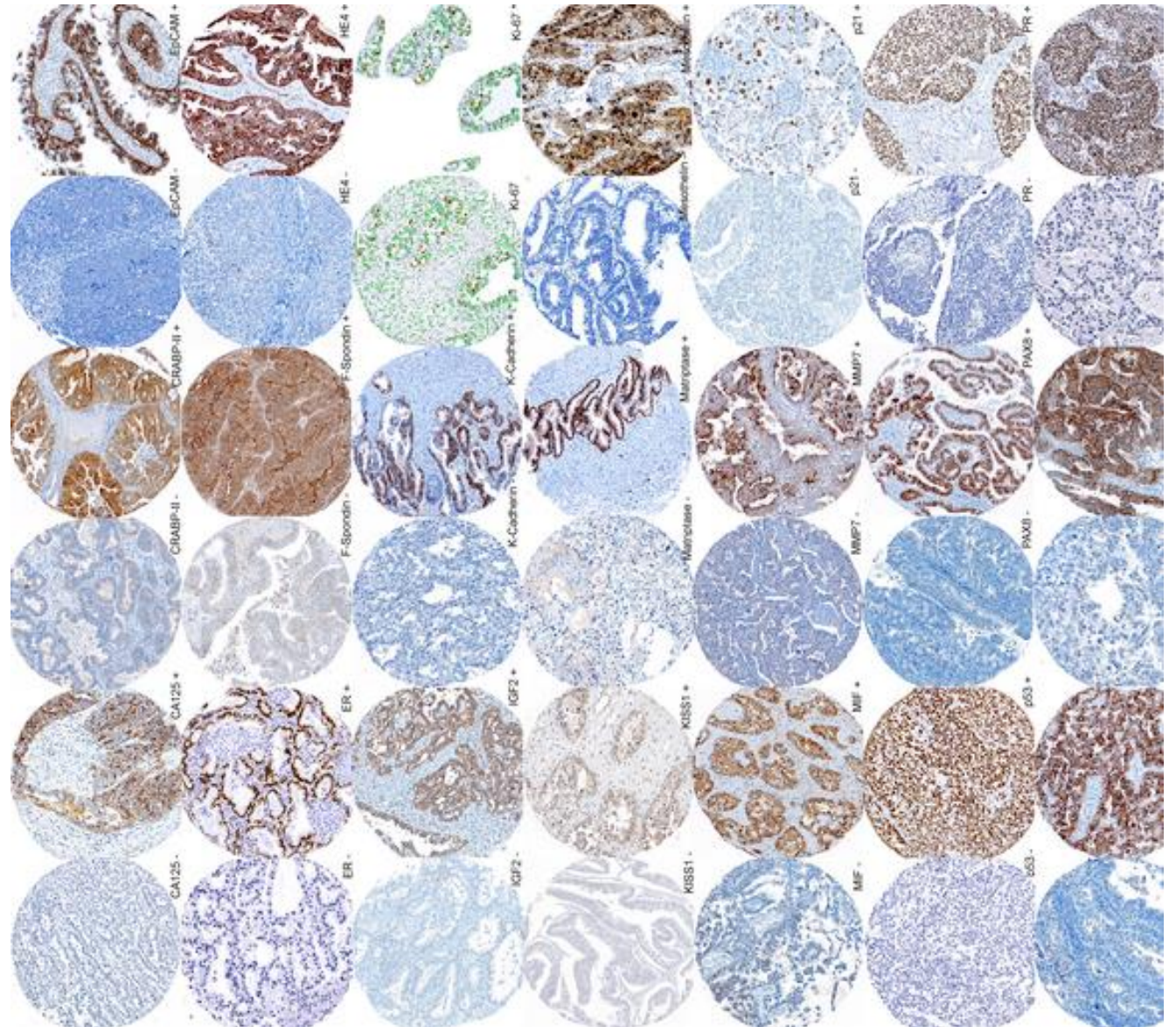
Disclosures

Royalties from UpToDate

Scientific Advisory Committee member for
the Ovarian Cancer Research Alliance

A new
understanding of
ovarian cancer.

- Ovarian cancer is not a single disease but five distinct histotypes.
- High Grade Serous Cancers (HGSC) are:
 - 70% of all ovarian cancers
 - The most lethal
 - Originate in the fallopian tube





In September 2010, OVCARE recommended changes in clinical and surgical practice to all BC gynecologists.

What?

- Salpingectomy at the time of hysterectomy.
- Salpingectomy in place of tubal ligation.
 - 'Opportunistic salpingectomy'

Why extend prevention to those with no increased genetic risk?

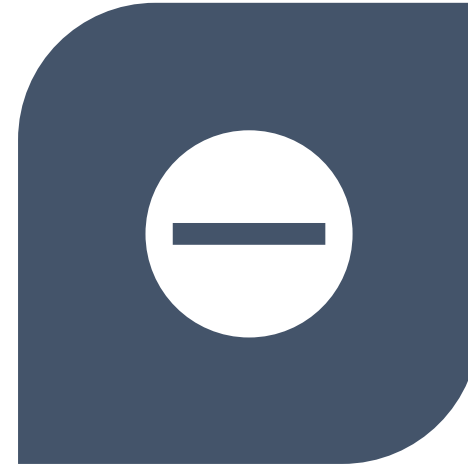
- ~80% of high-grade serous cancers arise in people with no known genetically increased risk



Poll question: Did you previously attend a FPON session on opportunistic salpingectomy?



YES

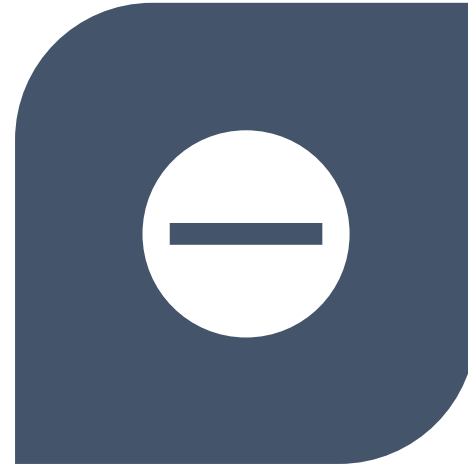


NO

Poll question: Have you previously had any patients who have sought your counsel about opportunistic salpingectomy?



YES



NO

Poll question: Are you supportive of opportunistic salpingectomy in your practice?

Yes

No

I don't know enough about it

I have not needed to counsel anyone about it

What do we know about opportunistic salpingectomy?

Updated Effectiveness Study



- 45,296 people who had a comparison surgery
 - Comparison surgeries were hysterectomy with ovarian and fallopian tube conservation and tubal ligation
- 40,527 people who had OS
 - Hysterectomy with bilateral salpingectomy or bilateral salpingectomy for sterilization
- Follow-up: December 31, 2020

Cox Proportional Hazards Model for High Grade Serous Cancer

HGSC	Person years	Cancer events
OS group	189,101	≤ 5
Comparison group	370,133	21

HR=0.22 (0.05, 0.95)

Unlikely to be explained by differences in risk and protective factors for ovarian cancer across groups

	Hysterectomy alone or tubal ligation (n=45,296)	Opportunistic salpingectomy (n=40,527)
Age at time of surgery, yrs (SD)	42.4 (12.6)	40.7 (8.1)
Parity, mean live births (SD)	1.98 (1.1)	1.91 (1.0)
Pregnancies, mean number (SD)	2.41 (1.5)	2.32 (1.4)
OCP use, n(%)	21,665 (50.0)	23,876 (60.7)
OCP mean days (SD)	1085 (1230)	1322 (1465)
Endometriosis	4460 (9.9)	5251 (13.0)

***Bold** means clinically important difference between the groups

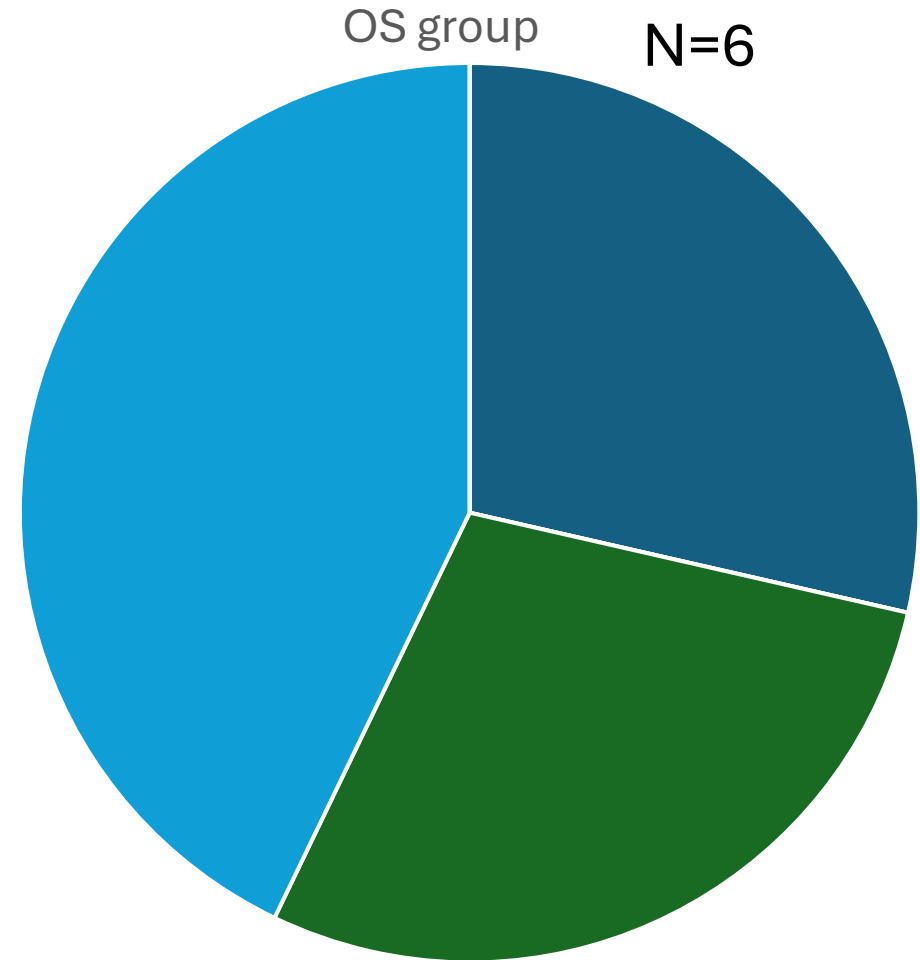
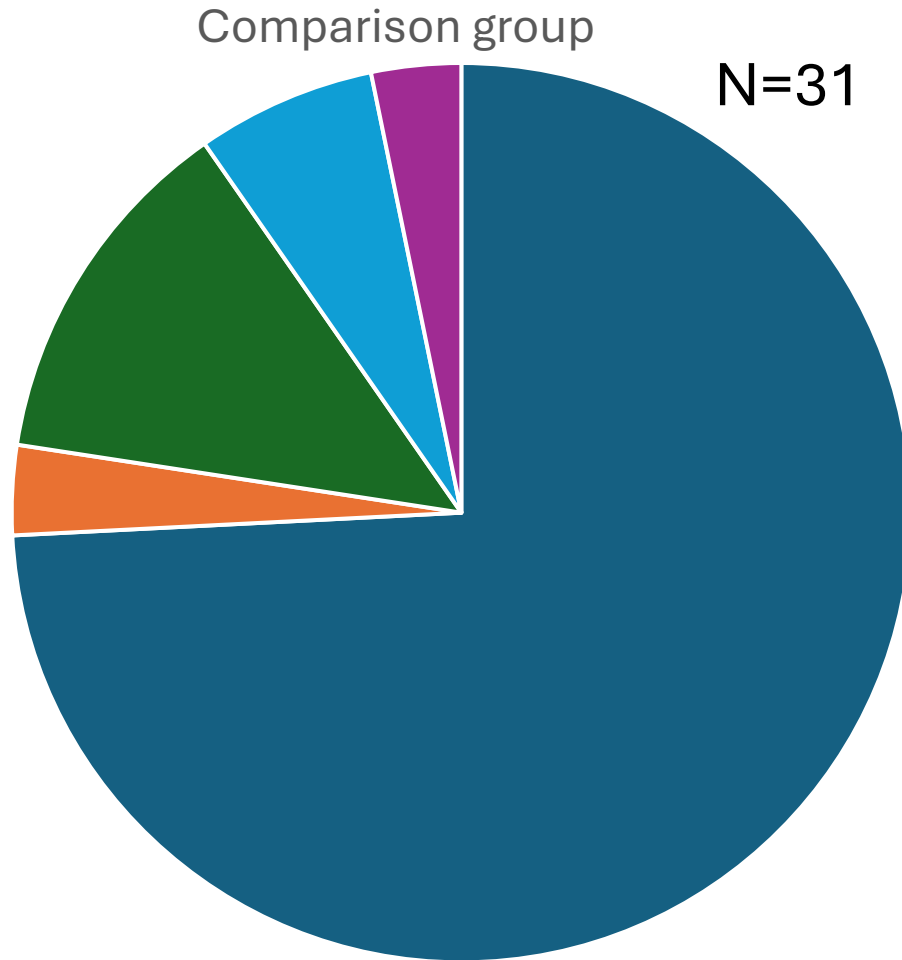
Cox Proportional Hazards Model for Breast Cancer



HGSC	Person years	Cancer events
OS group	188,418	218
Comparison group	368,138	492

HR=0.99 (0.84, 1.17)

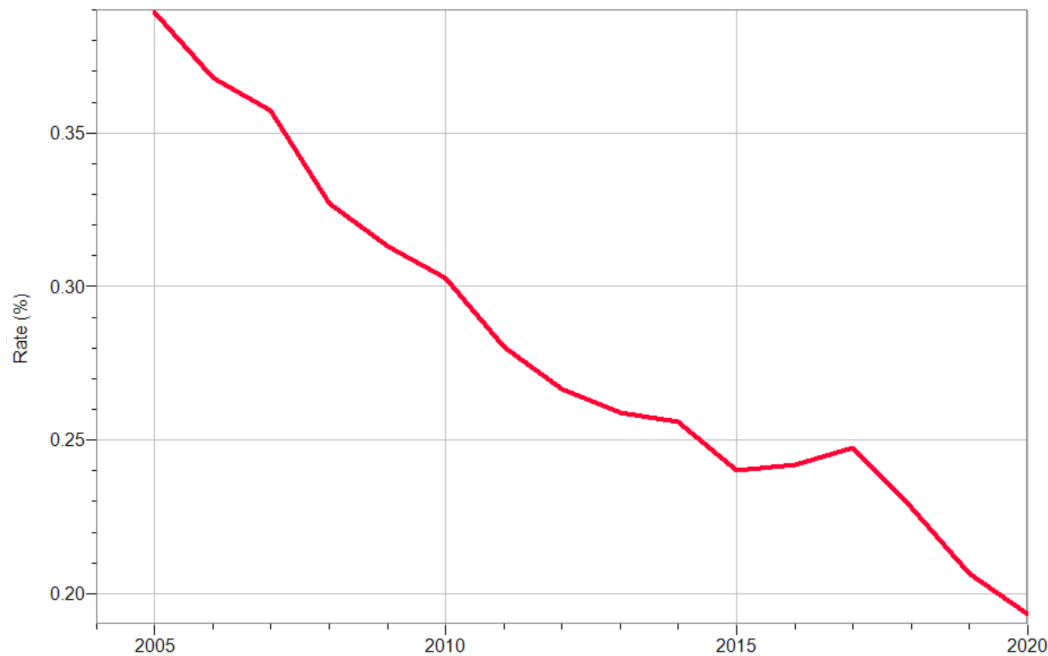
BC Histotype distribution comparison in OS group compared to control group – updated through 2020



■ high grade serous ■ low grade serous ■ endometrioid ■ clear cell ■ mucinous

■ high grade serous ■ low grade serous ■ endometrioid ■ clear cell ■ mucinous 14

Increasing opportunities to perform OS by expanding to general surgery



56% decrease in tubal sterilizations in BC
between 2002 and 2022

Clinical trial recruiting at St Pauls', VGH and UBC hospital



Dr. Carl Brown



Dr. Heather Stuart

Pilot study



- **Inclusion criteria:** Female biological sex undergoing colorectal surgery
- **Exclusion criteria:** Previous salpingectomy; Desired future pregnancy; Excessive pelvic scarring, known risk factors for ovarian cancer
- Patients were recruited to either the OS or the control arm if they declined the procedure

Results

- 119 have been consented, 100 (OS) and 19 (control)
- 85/ 94 (90%) had successful bilateral OS
- Reasons for not completing OS;
 - 2 had adhesions
 - 4 had inaccessible tubes
 - 3 had only one fallopian tube removed
 - 1 only had one tube
 - 2 had endometriosis complicating removal
 - 6 awaiting surgery

Preliminary
outcomes
following OS
during colorectal
surgery

Safety Outcomes	OS group (N=94)	Control group (n=19)
Bleeding	2 (2.1%)	0
Infection	8 (8.5%)	1 (5.2%)
Sought medical care after discharge	26 (27.7%)	6 (31.6%)
Readmission within 30 days n=79 for OS n=15 for control	8 (10.1%)	1 (6.7%)

Preliminary
outcomes
following OS
during colorectal
surgery

Process outcomes	OS group (N=94)	Percentage or range
Additional minutes in OR	4.22	1.1 – 18.2
Additional ports required	3	3.2%
Additional instruments required	12	12.8%

General surgery and urology are engaged to expand OS



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Viewpoint

June 1, 2023

Salpingectomy in Ovarian Cancer Prevention

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JAMA. 2023;329(23):2015-2016. doi:10.1001/jama.2023.6979

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SURGERY



Commentary

Opportunistic salpingectomy to decrease the mortality from ovarian cancer: Can we expand the pool of eligible patients?



Letters to the Editor

Contemporary Rates of Gynecologic Organ Involvement in Females with Muscle Invasive Bladder Cancer: A Retrospective Review of Women Undergoing Radical Cystectomy following Neoadjuvant Chemotherapy. Letter.

J Urol 2021; 206: 577.

To the Editor: Bree et al evaluated the rate of malignant gynecologic organ involvement (GOI) in 186

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cancer remains the main reason why many urologists still perform salpingo-oophorectomy at the time of RC.⁶

- 3) Finally, the authors point out that several studies demonstrate that ovarian cancer originates in the fallopian tubes, not the ovaries.⁷ It is important to add, however, that prophylactic salpingectomies are now regularly performed during various benign gynecologic surgeries.⁸ Salpingectomy has been shown to add minimal

Materials available for general surgeons: One-pager for consent and patient handouts



OPPORTUNISTIC SALPINGECTOMY (OS)

WHAT IS OPPORTUNISTIC SALPINGECTOMY?

OS is the removal of the fallopian tubes whenever the opportunity arises during another pelvic or abdominal surgical procedure for the purpose of ovarian cancer risk reduction

WHY SHOULD WOMEN CONSIDER OS?

Current evidence suggests OS is safe, technically easy to do, adds minimal OR time, and reduces the risk for developing high grade serous ovarian cancer (the most common and lethal form of ovarian cancer) by 80%

HOW CAN I DETERMINE IF THE PATIENT IS ELIGIBLE FOR OS?

Opportunistic salpingectomy

is the removal of the fallopian tubes at the time of another surgery

What are fallopian tubes?

Fallopian tubes are tubes that connect the ovaries to each side of the uterus. The only known role of the fallopian tubes is to transport eggs from the ovaries to the uterus.

What will happen?

If you choose to have both fallopian tubes removed

- 1 During your original planned surgery, the surgeon will remove the fallopian tubes and leave the ovaries.

- 2 Removing the fallopian tubes takes

FAQS

Will removing the fallopian tubes extend my hospital stay?

No, it will not extend your hospital stay.

Will this impact my childbearing abilities?

Yes, removing the fallopian tubes will prevent pregnancy. If you are planning future pregnancies, opportunistic salpingectomy is not for you.

Will this procedure impact my hormones or the onset of menopause?

Removing the fallopian tubes does not affect your ovaries, your hormone levels, or when menopause starts.

Would women accept opportunistic (prophylactic) salpingectomy at the time of nongynecologic surgery to prevent development of ovarian cancer?

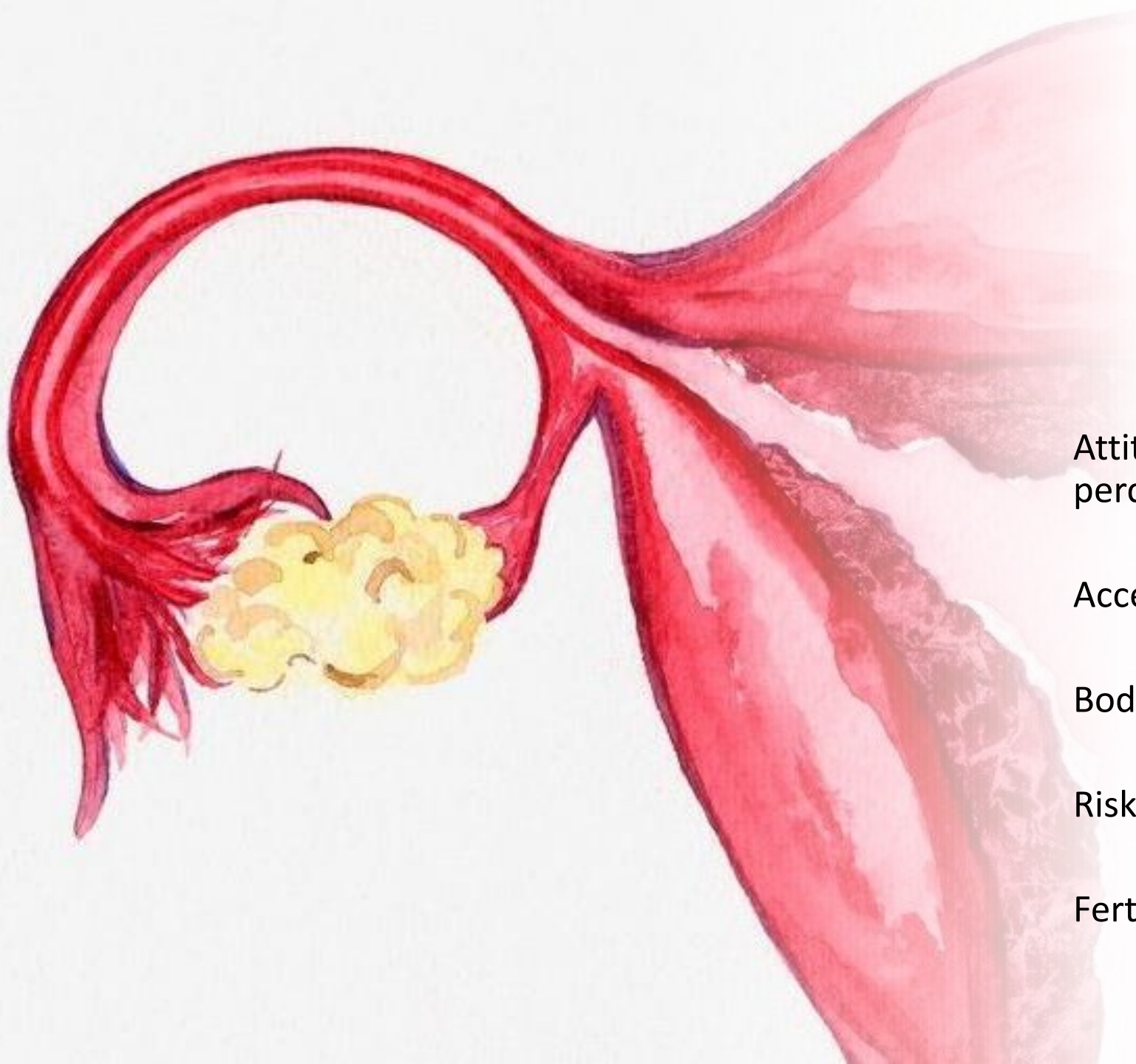


Gordana Tomasch, MD^a, Brigitte Bliem, PhD^a, Martina Lemmerer, MD^b,
Silvia Oswald, MD^c, Stefan Uranitsch, MD^b, Elfriede R Greimel, PhD^a,
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Karl Tamussino, MD, FACS^{a,*}



THE SOCIETY OF
OBSTETRICIANS AND
GYNAECOLOGISTS
— OF CANADA —





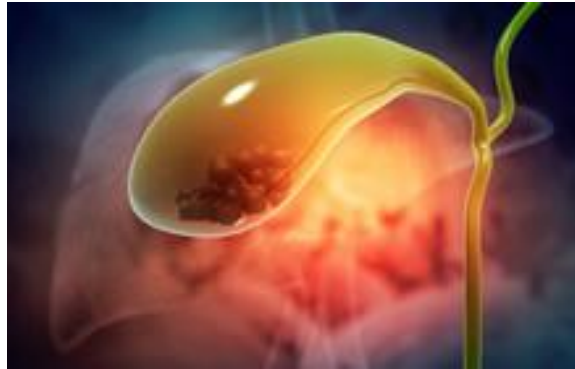
Attitudes, feelings, concerns,
perceptions

Acceptance



Body imaging, femininity

Risk perception

Fertility, sexuality



Prophylactic salpingectomy for prevention of ovarian cancer at the time of elective laparoscopic cholecystectomy

G. Tomasch¹, M. Lemmerer^{2,3}, S. Oswald⁵, S. Uranitsch³, C. Schauer⁴, A.-M. Schütz^{1,3}, B. Bliem¹, A. Berger³, P. F. J. Lang⁴, G. Rosanelli⁵, F. Ronaghi⁶, J. Tschmelitsch⁷, S. F. Lax⁸, S. Uranues²  and K. Tamussino¹ 

Counselling

FUNCTION

OVARIAN
SPARING

RATIONALE

CONCEPTION



HORMONES

SURGICAL
CONSIDERATIONS

Austrian Lap Chole trial results

- 60% of those approached consented to OS (n=105)
- 98 had successful bilateral salpingectomy (93%)
- No complications reported

Prophylactic salpingectomy for prevention of ovarian cancer at the time of elective laparoscopic cholecystectomy

G. Tomasch¹, M. Lemmerer^{2,3}, S. Oswald⁵, S. Uranitsch³, C. Schauer⁴, A.-M. Schütz^{1,3}, B. Bliem¹, A. Berger³, P. F. J. Lang⁴, G. Rosanelli⁵, F. Ronaghi⁶, J. Tschmelitsch⁷, S. F. Lax⁸, S. Uranues²  and K. Tamussino¹ 

Potential Impact of expanding OS to general surgery

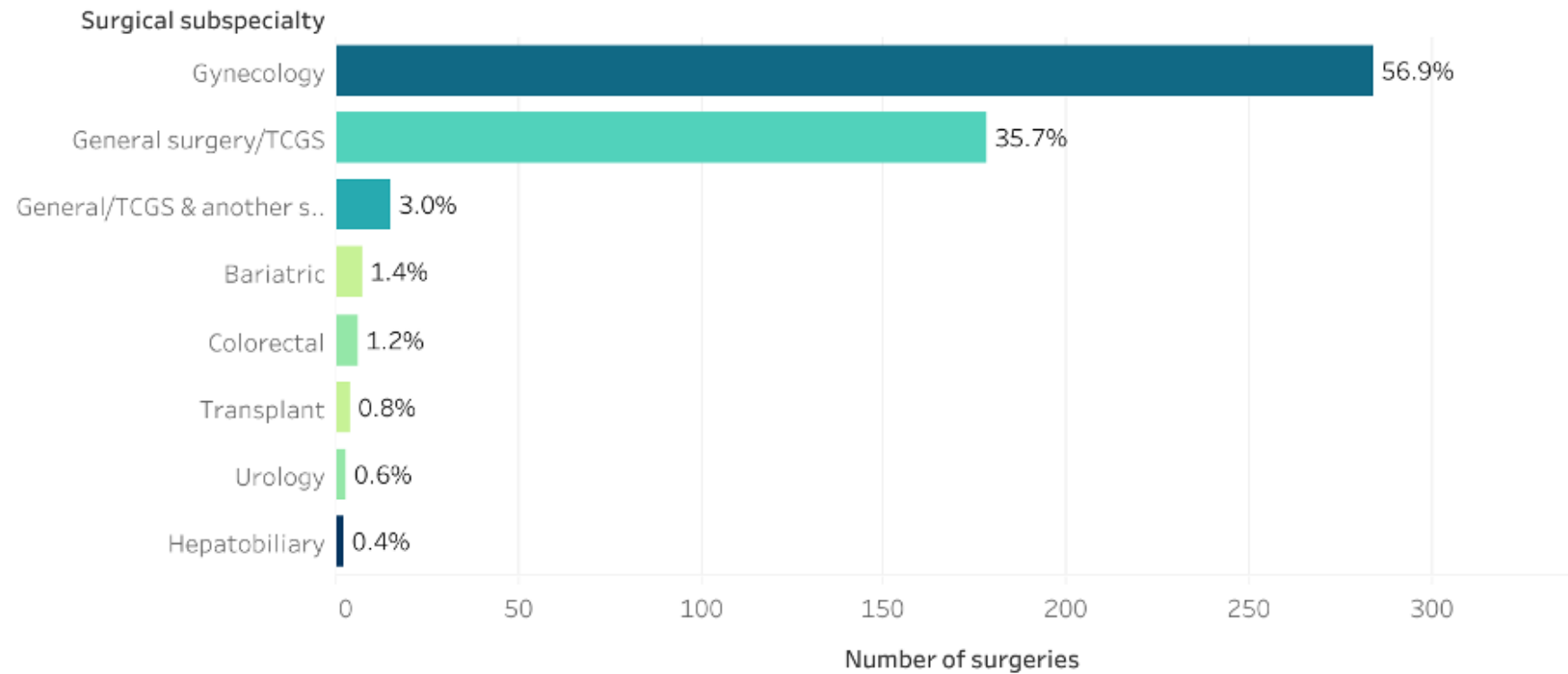
- Mayo clinic examined the proportion of high grade serous ovarian cancer patients diagnosed between 2014 and 2021 who had a previous surgical encounter where OS could have been performed



57%



Prior Abdominal/Pelvic Surgeries by Specialty



Abbreviations: TCGS, Trauma, Critical Care, and General Surgery

Survey Respondents		n	%
Gender identity (n=268)	Woman	125	46.6%
	Man	138	51.5%
	Prefer not to answer	5	1.9%
Length of time in practice (n=269)	Resident or fellow	49	18.2%
	≤5 years	50	18.6%
	6 to 10 years	51	19.0%
	11 to 20 years	76	28.3%
	≥21 years	43	16.0%

Survey Respondents		n	%
Surgical specialty (n=269)	General Surgery	226	84.0%
	Urology	43	16.0%
Surgical subspecialty (n=168)	Colon	92	54.8%
	Rectum	62	36.9%
	Hernia	60	35.7%
	Breast	58	34.5%
	Biliary	41	24.4%
	Skin	42	25.0%
	Liver/pancreas	17	10.1%
	Head and neck	12	7.1%
	Genitourinary oncology	24	14.3%
	Kidney	18	10.7%
	Prostate	15	8.9%
	Bladder	14	8.3%
	Urogynecology	6	3.6%

Survey Respondents		n	%
Province or territory of primary surgical practice or training program (n=268)	British Columbia	94	35.1%
	Quebec	84	31.3%
	Ontario	53	19.8%
	Alberta	20	7.5%
	Manitoba	12	4.5%
	New Brunswick	3	1.1%
	Nova Scotia	1	0.4%
	Newfoundland	1	0.4%
	Saskatchewan	0	0.0%
	Prince Edward Island	0	0.0%
	Yukon	0	0.0%
	Northwest Territories	0	0.0%
	Nunavut	0	0.0%

Survey Respondents		n	%
Setting of surgical practice, excluding current trainees (n=219)	Academic centre	83	37.9%
	University-affiliated community centre	92	42.0%
	Non-university affiliated community centre	44	20.1%
Population of practice community, excluding current trainees (n=219)	≤10,000	3	1.4%
	10,000-99,999	50	22.8%
	100,000-499,999	58	26.5%
	500,000-1,499,999	63	28.8%
	≥1,500,000	45	20.5%

Current practice



	Yes	No
Aware of OS recommendations	43.7	56.3
Average risk patient requested OS	8.9	91.1
Counselled average risk patient	15	85
Performed OS at elective surgery	11.8	80.7



Concerns



	Yes	No	Neutral
Lack of evidence	35.2	25.5	39.3
Medico-legal aspects of sterilization	57.1	21.3	21.6
Medico-legal aspects of early menopause	55.2	22	22.8
Additional time for consent	39.5	41.8	18.7
Competency in performing OS	51.1	38.5	10.4
Increased surgical time	40.6	39.5	19.9
Increased surgical equipment	21.9	61	17.1
Reimbursement	53.9	28.1	18

Tools

Increased patient awareness and knowledge of OS



	Yes
Surgical video	94.3
Online module	57.4
Didactic lecture	47.9
Assistance from gynecologist in OR	76.9
Patient handout	89.6
Imbed in surgical training	92.1

What are we doing to facilitate you changing your practice?

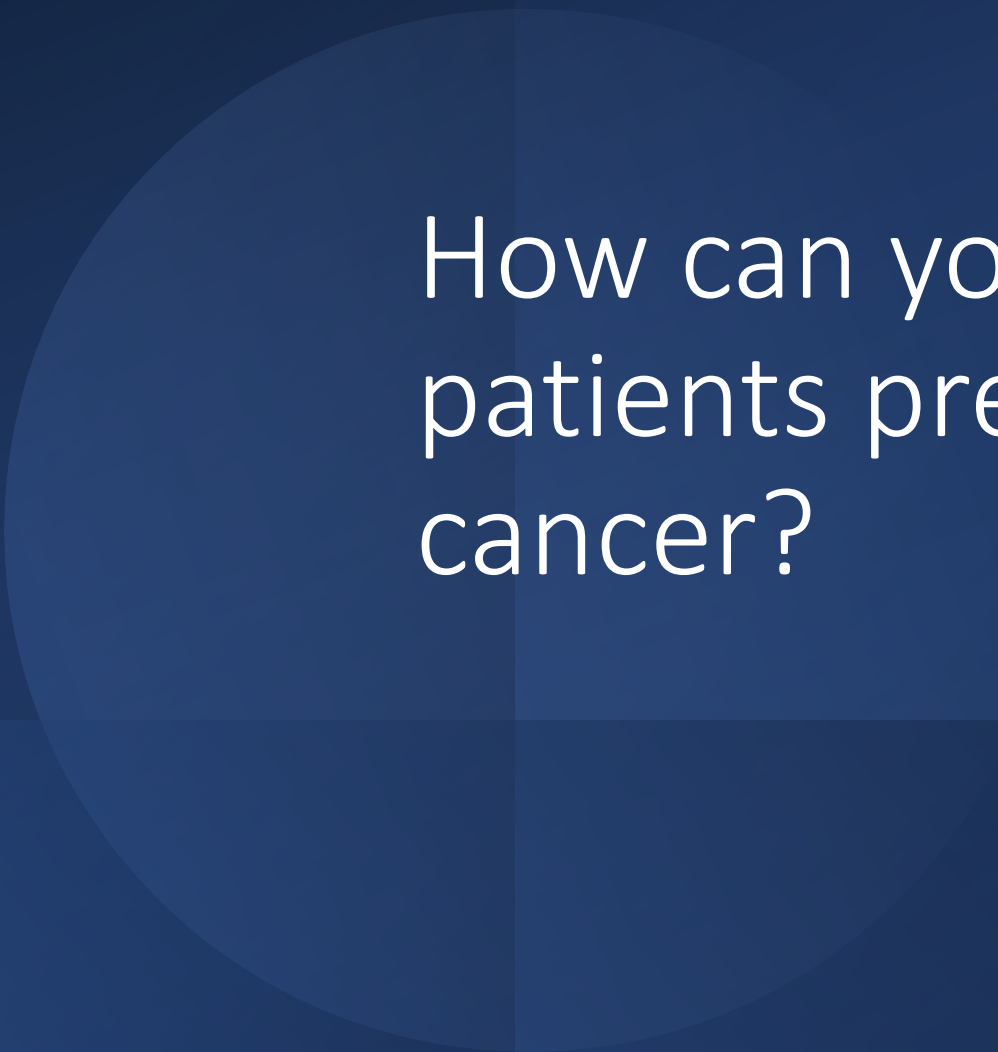
- Focusing first on postmenopausal patients in general surgery
- Fee code for general surgeons to bill
 - 07999 in equity with 04042 (\$381.62) @50% OR bill 04042 @50%
- Putting together a preceptorship program with OBGYN champions to assist general surgeons in adding this to their practice




Campaign in BC to expand OS

- Supported by the Specialist Services Committee through the Perioperative Clinical Action Network
 - Meeting with general surgeons to get their feedback and address their needs
- We are providing
 - Asynchronous course for doctors to take on their own time (in development)
 - Patient decision aid to help with counseling (in development)
- Further research
 - Clinical trial of OS during lap chole to provide more evidence





How can you help your
patients prevent ovarian
cancer?



When patients ask you whether they should add this to their gynecologic or general surgery:

- Share these data with them
- Help them make the right decision for them



When providing contraception counseling:

- If a patient desires no future pregnancies:
- Include the discussion of ovarian cancer risk reduction in your contraception counseling
- Patients at higher risk may self select into the salpingectomy for sterilization group

Poll question: What concerns do you think your patients will have for you about opportunistic salpingectomy, generally?

Not reversible/Can't change my mind

Hormones! Will this affect my hormones in any way or put me into early menopause

Pain/risks associated with the surgery

Other: Please tell me about this!

Poll question: What concerns do you think your postmenopausal patients will have for you about opportunistic salpingectomy during their general surgery?

General surgeon not
appropriate for this
procedure

Pain/risks associated with
the surgery

Other: Please tell me
about this!



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Thank-you

- Colleagues directly involved in this work:
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