

Evidensprofiler - NKR om hysterektomi (fjernelse af livmoderen) ved godartet sygdom

Figur 1. Evidensprofil – Fokuseret spørgsmål 1 (PICO 1). *Subtotal eller total hysterektomi ved benign sygdom.*

Population: Kvinder med indikation for hysterektomi pga. benign sygdom

Intervention: Subtotal hysterektomi

Sammenligning: Total hysterektomi

No of studies	Study design	Quality assessment					No of patients		Relative (95% CI)	Effect		Quality	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Subtotal hysterectomy	Total hysterectomy		Absolute (95% CI)			
Reoperation pga. postoperativ intraabdominal blødning. – Abdominal hysterektomi. (Repeat surgery, postoperative intraabdominal bleeding)													
1	randomised trials	serious 1	not serious	not serious	serious 2	none	1/94 (1.1%)	0/84 (0.0%)	RR 2.68 (0.11 to 65.01)	0 fewer per 1000 (from 0 fewer to 0 fewer)		LOW	CRITICAL
Stressinkontinens indenfor 2 år postoperativt. - Abdominal + laparoskopisk hysterektomi (Stress urinary incontinence within 2 years post surgery)													
5	randomised trials	serious 1	not serious	not serious	serious 3	none	35/478 (7.3%)	25/477 (5.2%)	RR 1.41 (0.86 to 2.31)	21 more per 1000 (from 7 fewer to 69 more)		LOW	CRITICAL
Tilfredshed med sex indenfor 2 år postoperativt. – Abdominal hysterektomi. (Satisfaction with sex within 2 years post surgery)													
2	randomised trials	serious 1	serious 4	not serious	serious 3	none	168/228 (73.7%)	164/226 (72.6%)	RR 1.01 (0.91 to 1.13)	7 more per 1000 (from 65 fewer to 94 more)		VERY LOW	CRITICAL
Smerter ved sex indenfor 2 år postoperativt. - Abdominal hysterektomi (Prevalence of pain during sex within 2 years post surgery)													
2	randomised trials	serious 1	serious 4	not serious	serious 3	none	19/228 (8.3%)	21/224 (9.4%)	RR 0.88 (0.49 to 1.59)	11 fewer per 1000 (from 48 fewer to 55 more)		VERY LOW	CRITICAL
Prolaps (POP) indenfor 2 år postoperativt. - Abdominal + laparoskopisk hysterektomi (Pelvic prolapse within 2 years post surgery)													
4	randomised trials	serious 1	not serious	not serious	serious 3	none	8/414 (1.9%)	2/425 (0.5%)	RR 2.70 (0.81 to 8.98)	8 more per 1000 (from 1 fewer to 38 more)		LOW	CRITICAL
Prolaps (POP ≥ grad 2) 7-11 år postoperativt. – Abdominal hysterektomi . (Pelvic prolapse ≥ stage 2, 7-11 years post surgery)													
2	randomised trials	serious 1	not serious	not serious	serious 3	none	31/135 (23.0%)	28/120 (23.3%)	RR 0.94 (0.62 to 1.43)	14 fewer per 1000 (from 89 fewer to 100 more)		LOW	CRITICAL
Cervikal dysplasi indenfor 12 mdr. postoperativt. – Abdominal hysterektomi. (Cervical dysplasia within 12 months post surgery)													
1	randomised trials	serious 1	not serious	not serious	serious 2	none	2/90 (2.2%)	0/85 (0.0%)	RR 4.73 (0.23 to 97.02)	0 fewer per 1000 (from 0 fewer to 0 fewer)		LOW	CRITICAL

Quality assessment								№ of patients		Effect			Quality	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Subtotal hysterectomy	Total hysterectomy	Relative (95% CI)	Absolute (95% CI)				
Livskvalitet (QoL). - Abdominal + laparoskopisk hysterektomi														
3	randomised trials	serious ¹	not serious	not serious	serious ³	none	-	-	-	Beskrevet narrativt under gennemgang af evidens	 LOW	IMPORTANT		
Cyklik vaginalblødning indenfor 2 år postoperativt. - Abdominal + laparoskopisk hysterektomi (Cyclical bleeding within 2 years post surgery)														
5	randomised trials	serious ¹	not serious	not serious	serious ²	none	62/475 (13.1%)	3/489 (0.6%)	RR 14.28 (5.51 to 36.98)	81 more per 1000 (from 28 more to 221 more)	 LOW	IMPORTANT		
Operationstid (min.) – Abdominal hysterektomi. (Operating time (mins))														
4	randomised trials	serious ¹	not serious	not serious	not serious	none	345	349	-	MD 11.26 lower (15.07 lower to 7.45 lower)	 MODERATE	IMPORTANT		
Operationstid (min.) - Laparoskopisk hysterektomi. (Operating time (mins))														
1	randomised trials	serious ¹	not serious	not serious	serious ³	none	71	70	-	MD 5 lower (14.8 lower to 4.8 higher)	 LOW	IMPORTANT		
Peroperativ blødning (ml) – Abdominal hysterektomi. (Blood loss during surgery (mls))														
3	randomised trials	serious ¹	not serious	not serious	not serious	none	294	295	-	MD 56.63 lower (99.58 lower to 13.68 lower)	 MODERATE	IMPORTANT		
Peroperativ blødning (ml) - Laparoskopisk hysterektomi. (Blood loss during surgery (mls))														
1	randomised trials	serious ¹	not serious	not serious	serious ²³	none	71	70	-	MD 36 lower (145.35 lower to 73.35 higher)	 LOW	IMPORTANT		
Sårinfektioner Postoperativt under indlæggelsen. - Abdominal + laparoskopisk hysterektomi (Wound infections, predischarge)														
3	randomised trials	serious ¹	not serious	not serious	serious ³	none	11/363 (3.0%)	13/370 (3.5%)	RR 0.86 (0.39 to 1.89)	5 fewer per 1000 (from 21 fewer to 31 more)	 LOW	IMPORTANT		

1. Manglende blinding kan have ført til bias.
2. Bredt konfidensinterval.
3. Den kliniske fremgangsmåde ville afvige, hvis den øvre versus den nedre grænse af konfidensintervallet repræsenterede sandheden.
4. Der er betydelige heterogenitet ($I^2 > 50\%$), hvilket kan afspejle de forskellige måder at måle/vurdere resultatet.

Figur 2. Evidensprofil – Fokuseret spørgsmål 2 (PICO 2). *Vaginal eller konventionel laparoskopisk hysterektomi ved benign sygdom.*

Population: Kvinder med indikation for hysterektomi pga. benign sygdom

Intervention: Konventionel laparoskopisk hysterektomi (TLH, LH, LAVH)

Sammenligning: Vaginal hysterektomi

№ of studies	Study design	Risk of bias	Quality assessment				Laparoscopic hysterectomy (TLH, LH, LAVH)	Vaginal hysterectomy	Relative (95% CI)	Effect		Quality	Importance
			Inconsistency	Indirectness	Imprecision	Other considerations				Absolute (95% CI)			
Reoperation (Repeat surgery)													
1	randomised trials	serious ¹	not serious	not serious	serious ²	none	0/40 (0.0%)	0/40 (0.0%)	not estimable	not estimable		 LOW	CRITICAL
Vaginaltopsruptur (Vaginal cuff dehiscence)													
-	-	-	-	-	-	-	-	-	-	not reported	-	-	CRITICAL
Læsion af naboorganer, blære eller ureter (Intraoperative visceral injury, bladder or ureter)													
7	randomised trials	serious ¹	not serious	not serious	serious ²	none	19/687 (2.8%)	7/518 (1.4%)	RR 2.03 (0.95 to 4.36)	14 more per 1000 (from 1 fewer to 45 more)		 LOW	CRITICAL
Læsion af naboorganer, tarm (Intraoperative visceral injury, bowel)													
2	randomised trials	serious ¹	not serious	not serious	serious ²	none	1/536 (0.2%)	0/368 (0.0%)	RR 3 (0.12 to 73.2)	0 fewer per 1000 (from 0 fewer to 0 fewer)		 LOW	CRITICAL
Læsioner på naboorganer der førte til konvertering til laparotomi (Intraoperative visceral injury - Unintended laparotomy)													
8	randomised trials	serious ¹	not serious	not serious	serious ²	none	31/728 (4.3%)	17/562 (3.0%)	RR 1.42 (0.83 to 2.45)	13 more per 1000 (from 5 fewer to 44 more)		 LOW	CRITICAL
Inkontinens (urge- og stressinkontinens). 12 mdr. follow up. (Incontinence, urgency and stress incontinence, 12 months follow up)													
1	randomised trials	serious ¹	not serious	not serious	serious ²	none	3/23 (13.0%)	3/24 (12.5%)	RR 1.04 (0.23 to 4.65)	5 more per 1000 (from 96 fewer to 456 more)		 LOW	CRITICAL
Livskvalitet (QoL)													
1	randomised trials	serious ¹	not serious	not serious	serious ³	none	-	-	-	Beskrevet narrativt under gennemgang af evidens		 LOW	IMPORTANT

No of studies	Study design	Risk of bias	Quality assessment				No of patients		Effect			Quality	Importance
			Inconsistency	Indirectness	Imprecision	Other considerations	Laparoscopic hysterectomy (TLH, LH, LAVH)	Vaginal hysterectomy	Relative (95% CI)	Absolute (95% CI)			
Prolaps (POP grad 1-2) 12 mdr. follow up. (Pelvic prolapse, stage 1-2)													
1	randomised trials	serious ¹	not serious	not serious	very serious ²³	none	6/23 (26.1%)	9/24 (37.5%)	RR 0.7 (0.29 to 1.64)	113 fewer per 1000 (from 240 more to 266 fewer)	 VERY LOW	IMPORTANT	
Indlæggelsestid (dage) (Length of hospital stay (days))													
9	randomised trials	serious ¹	serious ⁴	not serious	not serious	none	791	633	-	MD 0.42 higher (0.02 lower to 0.87 higher)	 LOW	IMPORTANT	
Operationstid (min.) (Operating time (mins))													
13	randomised trials	serious ¹	serious ⁴	not serious	not serious	none	980	821	-	MD 40.54 higher (27.69 higher to 53.39 higher)	 LOW	IMPORTANT	
Peroperativ blødning (ml) (Blood loss during surgery (mls))													
9	randomised trials	serious ¹	serious ⁴	not serious	not serious	none	319	318	-	MD 59.98 higher (12.88 lower to 132.83 higher)	 LOW	IMPORTANT	
Infektion (Infection)													
14	randomised trials	serious ¹	not serious	not serious	serious ²	none	113/1560 (7.2%)	82/1173 (7.0%)	RR 0.95 (0.73 to 1.24)	3 fewer per 1000 (from 17 more to 19 fewer)	 LOW	IMPORTANT	

1. Manglende blinding kan have ført til bias.
2. Bredt konfidensinterval.
3. Data baseret på 1 RCT.
4. Der er betydelige heterogenitet ($I^2 > 50\%$), hvilket kan afspejle de forskellige måder at måle/vurdere resultater.

Figur 3. Evidensprofil – Fokuseret spørgsmål 3 (PICO 4). *Robotassisteret laparoskopisk hysterektomi ved benign sygdom.*

Population: Kvinder med indikation for hysterektomi pga. benign sygdom

Intervention: Robotassisteret laparoskopisk hysterektomi

Sammenligning: Konventionel laparoskopisk hysterektomi

Quality assessment							№ of patients		Effect		Quality	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Robot-assisted laparoscopic hysterectomy	Conventional laparoscopic hysterectomy	Relative (95% CI)	Absolute (95% CI)		
Mortalitet (Mortality)												
-	-	-	-	-	-	-	-	-	-	not reported	-	CRITICAL
Reoperation pga. blødning, infektion, vaginaltopsruptur og hæmatom. (Reoperation because of bleeding, infection, VCD and hematoma)												
1	randomised trials	serious ¹	not serious	not serious	serious ^{2,3}	none	4/50 (8.0%)	2/50 (4.0%)	RR 2 (0.38 to 10.43)	40 more per 1000 (from 25 fewer to 377 more)	 LOW	CRITICAL
Læsion af naboor ganer (ureter-, tarm-, og karlæsioner). (Lesion of organs (ureter, bowel and vascular))												
2	randomised trials	serious ¹	not serious	not serious	serious ^{2,3}	none	1/76 (1.3%)	2/76 (2.6%)	RR 0.5 (0.05 to 5.34)	13 fewer per 1000 (from 25 fewer to 114 more)	 LOW	CRITICAL
Vaginaltopsruptur (Vaginal cuff dehiscence)												
1	randomised trials	serious ¹	not serious	not serious	serious ^{2,3}	none	0/50 (0.0%)	1/50 (2.0%)	RR 0.33 (0.01 to 7.99)	13 fewer per 1000 (from 20 fewer to 140 more)	 LOW	CRITICAL
Livskvalitet (QoL) Spørgeskema: SF-36 (fysiske komponent). 6 mdr. follow up. (QoL assessed with: SF-36 (physical component) follow up: 6 months)												
1	randomised trials	serious ¹	not serious	not serious	serious ^{2,3}	none	19	19	-	mean 1 lower (6.09 lower to 4.09 higher)	 LOW	IMPORTANT
Indlæggelsestid (dage) (Length of hospital stay (days))												
1	randomised trials	serious ¹	not serious	not serious	serious ³	none	50	50	-	MD 0.2 higher (0.17 lower to 0.57 higher)	 LOW	IMPORTANT
Operationstid (min.) (Operating time (mins))												

Quality assessment							Nº of patients		Effect		Quality	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	Robot-assisted laparoscopic hysterectomy	Conventional laparoscopic hysterectomy	Relative (95% CI)	Absolute (95% CI)		
2	randomised trials	serious ¹	not serious	not serious	serious ⁴	none	76	76	-	MD 23.47 higher (14.01 higher to 32.92 higher)		IMPORTANT
Peroperativ blødning (ml) (Blood loss during surgery (mls))												
1	randomised trials	serious ¹	not serious	not serious	serious ²³	none	50	50	-	MD 8 higher (13.02 lower to 29.02 higher)		IMPORTANT
Infektion (Infection)												
1	randomised trials	serious ¹	not serious	not serious	serious ²³	none	2/50 (4.0%)	1/50 (2.0%)	RR 2 (0.19 to 21.36)	20 more per 1000 (from 16 fewer to 407 more)		IMPORTANT

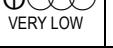
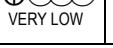
1. Manglende blinding kan have ført til bias.
2. Bredt konfidensinterval.
3. Den kliniske fremgangsmåde ville afvige, hvis den øvre versus den nedre grænse af konfidensintervallet repræsenterede sandheden.
4. Der er betydelige heterogenitet ($I^2 > 50\%$), som kan afspejle de forskellige måder at måle/vurdere resultatet.

Figur 4. Evidensprofil – Fokuseret spørgsmål 5 (PICO 6). *Fjernelse af æggelederne i forbindelse med hysterektomi.*

Population: Kvinder med indikation for hysterektomi pga. benign sygdom

Intervention: Hysterektomi med salpingekтоми

Sammenligning: Hysterektomi uden salpingekтоми

№ of studies	Study design	Quality assessment						№ of patients		Effect		Quality	Importance
		Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	hysterectomy with salpingectomy	hysterectomy without salpingectomy	Relative (95% CI)	Absolute (95% CI)			
Reoperation (Repeat surgery)													
1	observational studies	serious 1	not serious	not serious	serious 2	none	3/72 (4.2%)	28/223 (12.6%)	RR 0.33 (0.1 to 1.06)	84 fewer per 1000 (from 8 more to 113 fewer)	 VERY LOW	CRITICAL	
Operation på salpinges (pga. hydrosalpinges og pyosalpinges) follow up 0-5 år. (surgery on salpinx (hydrosalpinx and pyosalpinx) follow up 0-5 years)													
1	observational studies	serious 1	not serious	not serious	serious 2	none	0/72 (0.0%)	10/223 (4.5%)	RR 0.15 (0.01 to 2.46)	38 fewer per 1000 (from 44 fewer to 65 more)	 VERY LOW	CRITICAL	
Tubacancer. Gns. follow up: non-PBS^{**} 92 mdr., PBS† 55 mdr. (Tubal cancer, follow up non-PBS^{**} 92 months., PBS† 55 months)													
1	observational studies	serious 1	not serious	not serious	serious 2	none	0/72 (0.0%)	0/223 (0.0%)	not estimable	not estimable	 VERY LOW	CRITICAL	
Ovariecancer. Gns. follow up: non-PBS^{**} 92 mdr., PBS† 55 mdr. (Ovarian cancer, follow up non-PBS^{**} 92 months., PBS† 55 months)													
1	observational studies	serious 1	not serious	not serious	serious 2	none	0/72 (0.0%)	0/223 (0.0%)	not estimable	not estimable	 VERY LOW	CRITICAL	
Anti Müllersk Hormon (AMH) ng/mL. 3 mdr. follow up. (Anti-Müllerian Hormone, follow up: 3 months)													
1	randomised trials	serious 3	not serious	not serious	serious 4	none	14	13	-	MD 0.04 higher (1.95 lower to 2.03 higher)	 LOW	CRITICAL	
Anti Müllersk Hormon (AMH) ng/mL. 3 mdr. follow up. (Anti-Müllerian Hormone, follow up: 3 months)													
1	observational studies	serious 1	not serious	not serious	serious 2	none	79	79	-	MD 0.02 lower (0.16 lower to 0.12 higher)	 VERY LOW	CRITICAL	
Infektion (Infection)													
1	observational studies	serious 1	not serious	not serious	not serious	none	3/137 (2.2%)	14/145 (9.7%)	RR 0.23 (0.07 to 0.77)	74 fewer per 1000 (from 22 fewer to 90 fewer)	 VERY LOW	IMPORTANT	

1. Historisk comparator som der ikke er justeret for.
2. Brede konfidensinterval.
3. Manglende blinding kan have ført til bias.
4. Den kliniske fremgangsmåde afgiver, hvis den øverste versus den nedre grænse af CI repræsenterede sandheden.

Figur 5. Evidensprofil – Fokuseret spørgsmål 6 (PICO 9). *Suspension af vaginaltoppen i forbindelse med hysterektomi.*

Population: Kvinder med indikation for hysterektomi pga. benign sygdom (ikke prolaps)

Intervention: Suspension af vaginaltoppen

Sammenligning: Ingen suspension af vaginaltoppen

Quality assessment							Nº of patients		Effect			Quality	Importance
Nº of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	suspension of the vaginal vault	no suspension	Relative (95% CI)	Absolute (95% CI)			
Prolaps (POP) (Pelvic prolapse)													
-	-	-	-	-	-	-	-	-	-	not reported	-	CRITICAL	
Stressinkontinens 6 mdr. follow up. (Stress incontinence, follow up: 6 months)													
1	randomised trials	very serious ^{1,2}	not serious	not serious	serious ¹	none	6/32	6/36	RR 1.13 (0.40 to 3.14)	22 more per 1000 (from 100 fewer to 357 more)	 VERY LOW	CRITICAL	
Læsion af naboorganer (skader på kar, ureter og blære) (Lesion of organs (vascular, ureter and bladder injury))													
1	randomised trials	very serious ^{1,2}	not serious	not serious	serious ¹	none	4/32 (12.5%)	4/36 (11.1%)	RR 1.13 (0.31 to 4.13)	14 more per 1000 (from 76 fewer to 348 more)	 VERY LOW	CRITICAL	
Reoperation (Repeat surgery)													
-	-	-	-	-	-	-	-	-	-	not reported	-	IMPORTANT	
Livskvalitet (QoL)													
-	-	-	-	-	-	-	-	-	-	not reported	-	IMPORTANT	
Operationstid (min.) (Operating time (mins))													
1	randomised trials	very serious ^{1,2}	not serious	not serious	serious ¹	none	32	36	-	mean 4.5 higher (14.88 lower to 23.88 higher)	 VERY LOW	IMPORTANT	

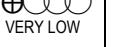
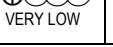
1. Manglende blinding kan have ført til bias.
2. Randomisering med forskelle i baseline karakteristika i de to studiearme.
3. Der er lav tillid til estimaterne pga. de forskellige baseline karakteristika for stressinkontinens.
4. Brede konfidensinterval.

Figur 6. Evidensprofil – Fokuseret spørgsmål 9 (PICO 7). *Sutur med eller uden modhager til lukning af vaginaltoppen ved total laparoskopisk hysterektomi.*

Population: Kvinder der får foretaget total laparoskopisk hysterektomi pga. benign sygdom

Intervention: Sutur med modhager

Sammenligning: Sutur uden modhager

Quality assessment							№ of patients		Effect			Quality	Importance
№ of studies	Study design	Risk of bias	Inconsistency	Indirectness	Imprecision	Other considerations	barbed suture	non-barbed suture	Relative (95% CI)	Absolute (95% CI)			
Reoperation for vaginaltopsruptur (Repeat surgery because of vaginal cuff dehiscence)													
1	randomised trials	serious ¹²	not serious	not serious	serious ³	none	1/32 (3.1%)	1/31 (3.2%)	RR 0.97 (0.06 to 14.82)	1 fewer per 1000 (from 30 fewer to 446 more)	 LOW	CRITICAL	
Vaginaltopsruptur (min. follow up > 1 mdr.) (Vaginal cuff dehiscence (min. follow up > 1 month))													
1	observational studies	serious ⁴	not serious	not serious	serious ⁵	none	1/69 (1.4%)	4/163 (2.5%)	RR 0.59 (0.07 to 5.19)	10 fewer per 1000 (from 23 fewer to 103 more)	 VERY LOW	CRITICAL	
Infektion i vaginaltoppen, follow up: 3 uger (Infection of the vaginal cuff, follow up: 3 weeks) (follow up: 3 weeks)													
1	randomised trials	serious ¹²	not serious	not serious	serious ³	none	1/32 (3.1%)	3/31 (9.7%)	RR 0.32 (0.04 to 2.94)	66 fewer per 1000 (from 93 fewer to 188 more)	 LOW	CRITICAL	
Postoperativte infektionskomplikationer (infektioner med kendt fokus) (Postoperative infectious complications (known focus))													
2	observational studies	serious ⁴	not serious	not serious	serious ¹⁵	none	5/132 (3.8%)	4/302 (1.3%)	RR 2.85 (0.78 to 10.45)	25 more per 1000 (from 3 fewer to 125 more)	 VERY LOW	CRITICAL	
Seksuel funktion – dyspareuni follow up: 3 mdr. (Sexual function - dyspareunia follow up: 3 months) (follow up: 3 months)													
1	randomised trials	serious ¹²	not serious	not serious	very serious ¹⁶	none	2/10 (20.0%)	1/12 (8.3%)	RR 2.40 (0.25 to 22.75)	117 more per 1000 (from 63 fewer to 1000 more)	 VERY LOW	IMPORTANT	
Kvindelig seksuel funktionsscore (FSFI, højere bedre, score-interval: 2 til 36). Follow up: 3 mdr. (Female sexual function score (FSFI, higher better, score ranges: 2 to 36). Follow up 3 months (follow up: 3 months; assessed with: Questionnaire)													
1	randomised trials	serious ¹²	not serious	not serious	serious ⁵	none	-/21	-/21	The median female sexual function score in the intervention group was 26.4 (2.0–33.2) and in the comparison group the median female sexual function score was 30.1 (10.0–35.1).			 LOW	IMPORTANT
Operationstid (min.) (Operating time (mins)) (assessed with: min.)													
1	randomised trials	serious ¹²	not serious	serious ⁷	serious ³	none	32	31	-	mean 12.5 higher (21.7 lower to 46.7 higher)	 VERY LOW	IMPORTANT	

- Manglende blinding kan have ført til bias.
- Loss to follow up beskrives ikke grundigt nok.
- Bredt konfidensinterval.

4. Historiske comparator som der ikke er justeret for.
5. Der er ikke kontrolleret for potentielle confoundere.
6. Data baseret på spørgeskemaer. Lille responsrate.
7. Der anvendes LapraTy i studiearmen med sutur uden modhager. Det kan give et upræcist billede af operationstiden i forhold til andre suturmetoder.