

## The Gynecological Surgery of Jehovah's Witnesses

Milan Kudela\*, Petr Dzvincuk, Radim Marek, Karel Huml, Pavel Hejtmánek and Radovan Pilka

Faculty of Medicine and Dentistry, Department of Obstetrics and Gynecology, Palacky University Olomouc, Czech Republic

### Abstract

**Objective:** To present our experience with the surgical treatment of various diseases in patients belonging to the Church of Jehovah's witnesses.

**Methods:** The study included 34 patients belonging to the Church of Jehovah's witnesses who rejected blood transfusion. The operations on these patients were performed for malignant and benign disorders that could not be treated by conservative therapeutic procedures.

**Results:** The operation records were evaluated according to a set of criteria including the type of surgical procedure estimated amount of blood loss, postoperative complications and the outcome of surgical treatment. The least amount blood loss was secured by the robotic surgery.

**Conclusion:** Jehovah's witnesses represent a risk group of patients because of their refusal of blood transfusion. Indication for the operation and its performance represent serious decision steps that are always associated with a certain degree of risk. However when the principles of bloodless surgery are followed the therapeutic results are very good and in the properly indicated cases the scope of risk is acceptable.

**Keywords:** Jehovah's witnesses; Operations; Bloodless surgery; Robotic surgery

### Introduction

The Church of Jehovah's witnesses has almost 8 millions of followers around the world. Their number in the Czech Republic is estimated at approximately 13000 people. The most famous and debatable principle of their faith is refusal of blood transfusions. Similar to other women female Jehovah's witnesses experience gynecological problems that often cannot effectively be treated conservatively resulting in the need for a surgical solution. This presents a serious challenge for the gynecologist who has to decide either to operate under these conditions or to not operate because of risk of potential bleeding complications which may have fatal consequences.

The adherence to the rules of minimally invasive procedures usually also means minimal blood loss. Nevertheless, it is not possible to exclude unexpected complications during surgery that may result in significant blood loss and a critical need to restore blood circulation. Though the principles of bloodless surgery are generally accepted and can usually prevent heavy bleeding, it is not completely possible to rule out situations in which the decisions trected to transfusion may result in a question of life or death.

### Materials and Methods

Our study group includes 34 women who belonged to the Church of Jehovah's Witnesses and were admitted for surgery to the Department of Obstetrics and Gynecology of the University Hospital in Olomouc, from 2007 to 2014. In agreement with their faith all women signed the Informed Consent form which included an unambiguous rejection of receiving blood or blood derivatives. All patients underwent medical examination and anesthesiology consultation before the surgery. The surgical treatment was always the only option or the most optimal alternative of treatment. All operations were provided by standard surgical procedures and techniques routinely used at the department with an emphasis on blood sparing techniques. All operations were performed by one of three experienced surgeons. The patient's ages ranged from 42 to 72 years with a mean age of 54 years. The indication for the surgery was gynecological cancer in nine cases and the remaining 25 patients suffered from benign gynecologic diseases including uterine

fibroids, uterine or vaginal prolapse, chronic metrorrhagia, urinary incontinence or endometrial polyps. Three operations for malignant gynecologic tumors were performed by robotic surgery. The patient's consent to publish appropriate data was given orally.

### Results

No significant complications were observed during the surgery. Postoperative recovery was favorable in all cases. The hospital stay of the study patients did not differ from that of other patients. There was no need for blood transfusion.

Table 1 shows the diagnoses, surgical procedures and estimated blood loss during the operations.

### Discussion

During a professional career almost every gynecologist responsible for surgery has encountered a patient belonging to the Church of Jehovah's witnesses who requested an operation without blood transfusion. This situation always results in many questions to be answered. The real need for blood transfusion during the planned surgical procedure is in most cases rather small, but every surgeon remembers situations where an apparently simple operation suddenly became complicated by unexpected heavy bleeding. The surgeon then has to decide how to proceed in such a situation. Legal regulations in different countries usually dictate how to proceed but there are still several questions that remain unanswered. The decision of how to address such patients depends on the personal opinion, responsibility and individual approach of the surgeon.

\*Corresponding author: Prof. Milan Kudela, Gynekologicko-porodnická klinika LF UP a FN, I.P.Pavlova 6, 775 20 Olomouc, Czech Republic, Tel: 00420 58 585 4624; E-mail: kudelam@fnol.cz

Received May 08, 2015; Accepted May 28, 2015; Published June 04, 2015

**Citation:** Kudela M, Dzvincuk P, Marek R, Huml K, Hejtmánek P, et al. (2015) The Gynecological Surgery of Jehovah's Witnesses. Gynecol Obstet (Sunnyvale) 5: 297. doi:10.4172/2161-0932.1000297

**Copyright:** © 2015 Kudela M, et al. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Patient No	Pathology	Type of surgery	Estimated blood loss (ml)	Preoperative Hb (g/l)	Postoperative Hb (g/l)	Hb difference (g/l)
1	POP	VH	100	120	100	20
2	leiomyoma	LAVH, BSO	150	102	87	15
3	leiomyoma	LAVH	150	120	103	17
4	ovarian cancer	AH, BSO, OE, APE	300	143	101	42
5	leiomyoma	LAVH	250	120	108	12
6	metrorrhagia	HSC, D and C	10	142	142	0
7	leiomyoma	LAVH	250	117	104	13
8	POP	VH, Vaginal repair	250	143	112	31
9	POP	VH, Vaginal repair	30	139	118	21
10	SUI	VHY, Vaginal repair, TOT	100	124	114	10
11	leiomyoma	LAVH	50	92	88	4
12	endometrial polyp	HSC, D and C	10	140	140	0
13	metrorrhagia	LSC, HSC, D and C	10	140	135	5
14	POP	VH, Vaginal repair	100	140	120	20
15	endometrial cancer	AH, BSO,	150	140	119	21
16	ovarian cancer	AH,OE, APE	150	122	108	14
17	cervical cancer	RTLH, BSO, LYP	20	116	89	27
18	leiomyoma	AH, BSO,	300	145	126	19
19	endometrial cancer	RTLH, BSO,LYP,LYPA	20	137	112	25
20	leiomyoma	AH	150	122	80	42
21	endometrial cancer	RTLH, BSO, LYP,LYPA	350	143	122	21
22	leiomyoma	AH, BSO	150	120	100	20
23	endometrial polyp	HSC, D and C	10	130	130	0
24	endometrial cancer	AH, BSO, LYP	300	120	99	21
25	leiomyoma	VH	40	154	140	14
26	metrorrhagia	HSC, D and C	10	117	115	2
27	ovarian cancer	BSO, OE, debulking	100	120	99	21
28	leiomyoma	LSC myomectomy	250	130	126	4
29	metrorrhagia	HSC, D and C	0	110	108	2
30	POP	VH, Vaginal repair	150	130	125	5
31	leiomyoma	AH	250	115	105	10
32	POP	VH	80	135	128	7
33	POP	VH, Vaginal repair	90	138	130	8
34	metrorrhagia	HSC, D and C	10	112	110	2

**Table 1:** The diagnoses, surgical procedures and estimated blood loss during the operations. LAVH: Laparoscopic assisted vaginal hysterectomy, HSC: Hysteroscopy, BSO: Bilateral salpingo oophorectomy, TOT: Tension free transobturator vaginal tape, VH: vaginal hysterectomy, AH :abdominal hysterectomy, OE: Omentectomy, APE: Appendectomy, LSC: Laparoscopy, RTLH: Robot assisted total laparoscopic, LYP: Pelvic lymphadenectomy, LYPA: Paraaortic lymphadenectomy, SUI: Stress Urinary Inkontinence, POP: Pelvic organ prolapse.

The Professional and Ethical Codex of the Czech Medical Chamber (Article 2, paragraph 5, No. 10) allows the surgeon to decline a request to operate on a patient refusing blood transfusion when the surgery is a planned not urgent procedure [1]. On the other hand it is an ethical and moral problem to refuse to operate on a patient, especially when the surgical treatment is the only or by far the most optimal course of treatment and the alternative non-surgical conservative treatment will not have a guaranteed acceptable result. However, it is very unethical if a surgeon refuses to operate on such patients particularly if sarcastic comments are made that offend the patient's faith. We have been operating on Jehovah's witnesses in our department for several years such that these patients frequently seek out our department for help. However this does not mean that we admit all patients who request that we perform an operation without blood transfusion. A thorough and responsible consideration of the most suitable treatment is an elementary requirement. An alternative conservative therapy that will bring similar results, must be always preferred. However,

in many cases the surgical approach is the only possible therapeutic solution or at least the one that brings far better benefit than other treatment modalities. In all cases we have to consider all risks of the planned surgical procedure and then carry out the operation only if the potential risk is acceptable.

A difficult situation may arise if a gynecologist meets a young patient with chronic menometrorrhagia resulting in severe sideropenic anemia. All efforts to control the excessive bleeding using conservative treatment failed and surgery is the only reasonable solution [2]. On the other hand, is it possible to risk general anesthesia and surgery on a patient suffering from severe or even critical anemia? The contemporary sophisticated surgical and anesthesiological techniques used by a skilled and experienced surgeon guarantee the performance of most routine operations with acceptable risk. There are only a few very complicated and high risk cases where surgery is not justified [3-6].

The current operative techniques are primarily aimed not only at stopping and controlling bleeding but at preventing it. Almost all surgical procedures now can be performed without heavy bleeding and the need of transfusion [7-9]. The only exceptions are some extremely challenging operations such as organ transplantations or extensive operations for advanced malignant tumors.

The opposite extreme is the excessively self-confident uncritical surgeon who feels able to manage all possible dangerous complications. It is also irresponsible to indicate surgery in cases that are clearly or even marginally inoperable. The failure of such surgery with possibly fatal consequences would mean a tragedy not only for the patient but also for the conscience of the surgeon. In case of an unsuccessful treatment a well-formulated and signed negative informed consent may give the surgeon some protection against possible legal suits but it does not solve all of the potential problems. Nevertheless, it is always an essential and necessary part of the medical documentation [1,10]. The determination of which surgical procedure and technique are best for surgery on Jehovah's Witnesses is relatively easy. They should be operated in the same way and with the same care as for any other patients. Unnecessary blood loss is always harmful for any patient not only for Jehovah's witnesses. Blood transfusion is then only a final resort in case of life threatening bleeding. Bleeding and unnecessary blood loss are in many cases avoidable and often are caused by inexperience or carelessness of the surgeon. Blood transfusion itself always presents a certain health risk and inappropriate use has negative financial consequences as well [11]. Apart from the replacement of acute blood loss no other positive therapeutic effects have been proven so far for transfusion in surgical patients. Our group of 34 Jehovah's witnesses who were operated on in our department is not large enough to give statistically significant results. The sample consists of patients with various diagnosis who underwent various surgical procedures ranging from simple hysteroscopy to radical operations for gynecological malignancies. The most suitable operation for gynecological malignancies seems to be a robotic surgery. Compared with classical surgery the robotic procedure results in lower blood loss [12].

## Conclusion

The results of the treatments of our group of 34 female Jehovah's witnesses show that these patients can be safely operated without the need for blood transfusion. Prerequisite for successful treatment with acceptable minimal risk are the responsible indication for operation

and the operation being performed by a skilled surgeon. The minimally invasive blood sparing operational techniques should be preferred. In severe complicated cases such as gynecological malignant tumors the robotic surgery should be preferred because it results in minimal blood loss. It is also important to fulfill all legal formalities including the patient's preoperatively signed Negative Informed Consent refusing blood transfusion.

## Acknowledgment

The study was supported by the grant from the Ministry of Health of the Czech Republic No. NT 13566-4/2012.

## References

1. Zaleski D (2010) Legal conditions respecting the right to refuse a blood transfusion. *Moderni Obstetrics and Gynecology* 18: 648-655.
2. Monk TG (2004) Preoperative recombinant human erythropoietin in anemic surgical patients. *Crit Care* 8 Suppl 2: S45-48.
3. Oladapo OT (2004) Elective abdominal hysterectomy in Nigerian Jehovah's Witnesses. *J Obstet Gynaecol* 24: 690-693.
4. Orji EO, Sotiloye D, Fawole AO, Huyinbo KI (2001) Jehovah's Witnesses and blood transfusion revisited: a review of the benefits and risks. *Niger J Med* 10: 55-58.
5. Simou M, Thomakos N, Zagouri F, Vlysmas A, Akrivos N, et al. (2011) Non-blood medical care in gynecologic oncology: a review and update of blood conservation management schemes. *World J Surg Oncol* 9: 142.
6. Yorozu T (2010) [Jehovah's Witness patients]. *Masui* 59: 1149-1152.
7. Donnez J, Nisolle M (1989) CO2 laser laparoscopic surgery. Adhesiolysis, salpingostomy, laser uterine nerve ablation and tubal pregnancy. *Baillieres Clin Obstet Gynaecol* 3: 525-543.
8. Pafko P (2009) Interview with prof. MD P. Pafkem. MD. *Modern Obstetrics and Gynaecology* 18: 643-647.
9. Shander A, Javidroozi M, Perelman S, Puzio T, Lobel G (2012) From bloodless surgery to patient blood management. *Mt Sinai J Med* 79: 56-65.
10. Retamales P A Sr, Cardemil H G (2009) [Benefits from the exercise of autonomy and informed consent: the example of Jehovah's Witnesses]. *Rev Med Chil* 137: 1388-1394.
11. Shander A, Hofmann A, Ozawa S, Theusinger OM, Gombotz H, et al. (2010) Activity-based costs of blood transfusions in surgical patients at four hospitals. *Transfusion* 50: 753-765.
12. Shiroki R, Maruyama T, Kusaka M, Washida S, Hikichi M, et al. (2011) [Robot-assisted laparoscopic partial nephrectomy using daVinci S-surgical system for localized renal tumor: report of initial five cases]. *Nihon Hinyokika Gakkai Zasshi* 102: 679-685.