

Canmeds Objectives of Training and Specialty Requirements in Gynaecologic Oncology University of Alberta 2017

Objectives of Training

DEFINITION

A specialist in Obstetrics and Gynaecology is a physician with special education and expertise in the field of women's health and reproduction. He/she has the appropriate medical, surgical and obstetrical and gynaecologic knowledge and skills for the prevention, diagnosis and management of a broad range of conditions affecting women's reproductive health. As well as providing clinical care and education in normal and complicated obstetrics and gynaecology, he/she may contribute significantly to research.

Two levels of knowledge and proficiency are referred to in this document.

An *extensive level* refers to an in-depth understanding of gynecologic oncology, from basic science to clinical application, and possession of skills to independently manage a problem in the arena of gynecologic oncology.

A *working level* indicates a level of knowledge sufficient for the clinical management of a condition, and/or an understanding of an approach or technique sufficient to counsel and recommend it, without having personally achieved mastery of that approach or technique.

GENERAL OBJECTIVES

Upon completion of training, the resident is expected to be a competent specialist capable of assuming an independent consultant's role in obstetrics and gynaecology. He/she must have acquired;

- the necessary knowledge, skills and attitudes for appropriate and competent management of a wide range of gynaecologic oncology conditions.
- the ability to develop the trusting and effective partnership with female patients necessary to manage and support a patient with a gynaecological cancer.
- the ability to demonstrate the knowledge, skills and attitudes relating to gender, culture and ethnicity pertinent to reproductive health care, and have the ability to appropriately incorporate gender, culture, and ethnic perspectives into research methodology, data presentation, and analysis.
- an understanding of the impact of various factors, including fear, anxiety, depression, socioeconomic status and domestic violence on pain, patient satisfaction and oncologic treatment outcomes.

Upon completion of his/her training, the resident in gynecologic oncology must have a working understanding of the normal function and the pathological processes and diseases that affect the female external genitalia and the pelvic viscera (including the vagina, cervix, uterus, fallopian tubes, and ovaries), the lower urinary tract, and the bowel. This includes an understanding of embryology and normal female development, and the unique biochemistry, physiology, anatomy, and gross and microscopic pathology of the genitourinary tract.

Management of a patient with a gynecologic oncology condition will require that the resident has the ability to:

1. take a history of the patient's problem
2. conduct a complete physical examination
3. demonstrate an understanding of the value and significance of laboratory, radiological and other diagnostic studies such as genetics and pathology
4. discuss the relative merits of various treatment alternatives including chemotherapy and radiation
5. list and discuss the indications, contraindications, types, variations, complications, and risks and benefits of surgical and non-surgical treatments
6. discuss the significance of perioperative and postoperative problems that might arise following surgery on the genitourinary tract

SPECIFIC OBJECTIVES

At the completion of training, the resident will have acquired the following competencies and will function effectively as:

1. Medical Expert / Clinical Decision-Maker

1.1 *General Objectives*

The general objectives of the gynaecologic oncology rotation are to provide the resident with comprehensive exposures and knowledge of gynecologic oncology with an emphasis on screening, prevention, diagnosis, and treatment of premalignant and malignant conditions of the female reproductive organs.

The resident in gynecologic oncology must demonstrate:

- diagnostic and therapeutic skills for effective and ethical patient care
- the ability to access and apply relevant information to clinical practice
- effective consultation services with respect to patient care, education, media relations and legal opinions
- recognition of personal limitations of expertise, including the need for appropriate patient referral and continuing medical education

1.2 *Specific Objectives*

In order to achieve these objectives, the resident must demonstrate both knowledge (cognitive skill) and technical ability in the approach to problems in the practice of gynecologic oncology.

1.2.1 COGNITIVE SKILLS

The resident will possess knowledge of the following clinical conditions or problems encountered commonly in the practice of gynecologic oncology. This list should be considered in its totality, and not be considered as comprehensive for all disorders in the practice of this specialty.

1.2.1.1 An *extensive level* of knowledge is required for the following:

a. *Carcinoma of the Vulva*

The resident will be able to:

- discuss the epidemiology of vulvar carcinoma, including known risk factors for premalignant and malignant cancer and the natural history of the disorder

- list the presenting signs and symptoms associated with premalignant and malignant lesions of the vulva
- classify and describe histologically benign vulvar lesions
- describe the indications, contraindications and complications of surgical excision and laser ablation for premalignant lesions and squamous cell carcinoma in situ of the vulva
- list the FIGO staging for carcinoma of the vulva
- know the prognosis associated with different stages of vulvar carcinoma
- describe the indications for appropriate referral for more extensive surgery, and radiation
 - discuss the indications and contraindications for simple vulvectomy, radical vulvectomy and inguinofemoral lymphadenectomy in the treatment of vulvar carcinoma
 - describe the common complications associated with radical vulvectomy and groin node dissection, sentinel node identification
 - be aware of the role of adjuvant radiation therapy in the management of women with cancer of the vulva
- become familiar with common non squamous malignancies of the vulva and discuss their clinical presentation, principles of management and prognosis

b. *Carcinoma of the vagina*

The resident will be able to:

- discuss the epidemiology of VAIN and carcinoma of the vulva, including the general incidence and known risk factors as well as the natural history of the disorder
- describe the most common pathologic subtypes of carcinoma of the vagina and their patterns of spread
- list the presenting signs and symptoms of carcinoma of the vagina
- list the FIGO staging for carcinoma of the vagina
- describe the indications for appropriate referral for more extensive surgery, radiation, and systemic therapy
 - discuss the indications, contraindications and complications associated with surgical treatment of carcinoma of the vagina
 - discuss the indications, contraindications and common complications associated with the use of radiation therapy for carcinoma of the vagina
- discuss the genital changes caused by intrauterine exposure to diethylstilboestrol and its association with clear cell adenocarcinoma of the vagina

c. *Carcinoma of the cervix*

The resident will be able to:

- discuss the epidemiology of carcinoma of the cervix, including its general incidence and known risk factors for cervical dysplasia and carcinoma of the cervix, as well as the natural history of the disorder
- become familiar with the underlying principles and challenges facing population screening programs for cervical cancer, including frequency of screening, techniques for taking smears, interpretation of the results and management of abnormal smears
- describe the histopathology of the normal transformation zone and its role in the pathogenesis of cervical intraepithelial neoplasia
- discuss the indications, contraindications and complications of cervical conization, laser therapy and loop electrosurgical procedures for the treatment of cervical dysplasia
- list the presenting signs and symptoms of invasive carcinoma of the cervix
- establish a plan of investigation for women with carcinoma of the cervix
- list the FIGO classification for staging of carcinoma of the cervix
- describe the indications for appropriate referral for more extensive surgery and radiation
 - discuss the indications, contraindications, potential advantages and complications of combined chemo and radiation therapy for carcinoma of the cervix
- describe the regional lymphatic spread pattern of cancer of the cervix, along with its implication on treatment and prognosis
- discuss the indications, contraindications and potential complications of pelvic exenteration in the treatment of recurrent cervical carcinoma

d. Carcinoma of the endometrium

The resident will be able to:

- discuss the epidemiology of carcinoma of the endometrium, including general incidence and known risk factors and the natural history of the disorder
- describe the current guidelines and indications for screening for endometrial cancer and an understanding of the reliability of current screening methods.
- list the presenting signs and symptoms of carcinoma of the endometrium
- establish a plan of investigation for women with possible carcinoma of the endometrium
- discuss the role of ultrasound in the investigation of a patient with postmenopausal bleeding
- discuss the indications and accuracy of cytology, endometrial biopsies and uterine curettage
- describe the histopathology of the normal postmenopausal endometrium, simple endometrial hyperplasia, atypical hyperplasia, and carcinoma of the endometrium
- list the FIGO classification for surgical staging of carcinoma of the endometrium
- be aware of the standard surgical staging procedures for carcinoma of the endometrium

- describe the regional lymphatic spread of carcinoma of the endometrium and its implication in the recommendations for surgical staging
- describe the indications for appropriate referral for more extensive surgery, radiation, and systemic therapy
 - discuss the role of adjuvant radiation and adjuvant chemotherapy in women with carcinoma of the endometrium
 - discuss the roles of hormonal therapy and chemotherapy for patients with recurrent or advanced carcinoma of the endometrium

e. *Carcinoma of the ovaries and fallopian tubes*

The resident will be able to:

- describe the epidemiology of carcinoma of the ovaries and fallopian tubes, including the general incidence and known risk factors and natural history of the disorders
- describe the management of an ovarian tumour discovered on routine pelvic examination in different age groups; adolescent, reproductive years, pre-menarchal and post-menarchal
- discuss the difficulties in screening for ovarian cancer
- list the presenting signs and symptoms associated with carcinoma of the ovary
- describe the gross appearance, clinical behaviour and pattern of spread of ovarian cancer
- be aware of the general histopathologic classification (WHO) of ovarian tumours
- discuss the pre-operative investigations of women with suspected ovarian cancer
- list the FIGO staging system for carcinoma of the ovary
- describe the standard surgical staging procedure for ovarian cancer
- describe the indications for appropriate referral for more extensive surgery, radiation, and systemic therapy
 - become familiar with the retroperitoneal approach for debulking of ovarian cancer, omentectomy, and lymph node sampling
 - describe the major intra-operative and post-operative complications associated with debulking surgery
 - be familiar with the indications for chemotherapy and the agents that are active in ovarian cancer
 - become familiar with the side effects related to different chemotherapeutic agents and their mode of actions
- understand the role of tumour markers in the diagnosis and follow-up of patients with ovarian cancers
- list the presenting signs and symptoms related to fallopian tube carcinoma
- describe the appropriate surgery for fallopian tube carcinoma
- discuss the principles of post-operative treatment for carcinoma of the fallopian tube

f. *Gestational Trophoblastic Neoplasia*

The resident will be able to:

- describe the epidemiology of gestational trophoblastic neoplasia (GTN), including general incidence and known risk factors and the natural history of the disorder
- describe the pathophysiology of complete and partial hydatidiform mole, invasive mole and choriocarcinoma
- establish a plan of investigation for the diagnosis and treatment of patients with GTN
- describe the methods of evacuating a hydatidiform mole and their respective indications, contraindications and complications
- establish a plan for the follow-up care of patients after evacuation of a hydatidiform mole
- discuss the investigations required in persistent GTN
- describe the indications for appropriate referral for more extensive surgery, radiation, and systemic therapy
 - list the indications for initiating chemotherapy in GTN
 - be familiar with the chemotherapy agents and regimens active in persistent hydatidiform mole and choriocarcinoma
- know the poor prognostic factors associated with persistent GTN and how they affect cure rates
- advise patients concerning contraception and future fertility in the follow-up period

1.2.1.2 A *working level* of knowledge is required for the following:

a. *Palliative Care*

The resident will develop the ability to;

- describe the common distressing symptoms of women suffering from terminal gynecologic cancer
- discuss the indications, contraindications, and side effects of commonly used narcotic analgesics in patients with advanced cancer
 - describe the anatomic structures responsible for pain in women with advanced cancer
- describe the management of obstructive uropathy in advanced cancer of the cervix
- describe the pathophysiology of bowel obstruction in women with advanced carcinoma of the ovary or fallopian tube
 - describe the medical and surgical management options for bowel obstruction in women with advanced cancer of the ovary, including the indications and contraindications for surgery

b. Medical Oncology

The resident will have an understanding of;
the principles and complications of chemotherapy for gynaecologic malignancies, including an understanding of the indications for consultation with appropriate specialists

- the potential short and long-term side effects of the commonly used chemotherapeutic agents
- the rationale for treatment programs and the quality of life for patients both on and post chemotherapy
- the treatment of recurrent disease, the rationale for drug choices, the prognosis, response rates etc.
- the role of palliative care: palliative surgery and symptom management in the face of incurable disease

c. Radiation Oncology

The resident will have an understanding of;

- the principles and complications of radiotherapy for gynaecologic malignancies, including an understanding of the indications for consultation with appropriate specialists
- the indications and principles of external radiation and intracavitary radiation for women with advanced cervical cancer
- the indications for adjuvant postoperative radiation in women with carcinoma of the endometrium and cervix
- the role of radiation therapy in women with ovarian cancer
- the factors that limit dosage to the normal surrounding pelvic tissues including the rectum, bladder and vagina
- the acute and long term complications of radiation therapy on the GI and GU tracts

d. Colposcopy

The resident will have an understanding of;

- the principles of colposcopy, including its limitations and the indications for referral for colposcopic assessment
 - how to identify the colposcopic features of dysplasia of the lower genital tract
 - the pathology relative to the cytology and the histology of dysplasia

1.2.2 TECHNICAL SKILLS

The fully-trained obstetrician and gynaecologist must possess a wide variety of technical skills in the practice of gynaecologic oncology. The following is a detailed list of

required technical skills, including surgical skills. This list should be considered in its totality, and not be considered as exhaustive for all disorders in specialty practice.

1.2.2.1 Diagnostic Procedures and Techniques

The resident will demonstrate an understanding of the indications, risks and benefits, limitations, and role of the following investigative techniques specific to the practice of gynaecologic oncology, and will be competent in their interpretation.

a. *Cytology and Histopathology*

- cervical cytology
- vulvar and vaginal biopsy
- wide local excision of vulvar lesions for diagnosis and treatment
- colposcopy with directed cervical biopsy (including LETZ)
- cervical polypectomy
- endocervical curettage
- endometrial biopsy

The resident will also be able to identify the gross and microscopic characteristics of; vulvar dermatoses, genital tract neoplasias (benign, premalignant, and malignant), and trophoblastic disease.

1.2.2.2 Therapeutic Technologies

The resident will have a *working* knowledge of the physics and technological application of the following therapeutic modalities, including the risks, benefits, and complications of these approaches.

- electrocautery
- lasers
- endometrial ablation (thermal and microwave)
- external beam and intracavitary radiotherapy

1.2.2.3 Surgical Skills

The list of surgical skills is divided into categories reflecting the frequency with which these procedures are encountered during residency training in gynaecologic oncology. The categorized list also reflects the level of competency expected for each surgical procedure after completion of a residency rotation in gynecologic oncology.

a. Surgical Procedures List A

The fully trained resident in gynaecologic oncology must be competent to *independently* perform the following procedures in List A. He/she should be able to manage a patient prior to, during and after all of the following procedures. The resident must be able to discuss with the patient the risks, benefits, and complications of these surgical treatments, as well as any available non-surgical treatment alternatives and the consequences of the absence of surgical treatment.

1. Open Gynecologic Procedures

- exploratory laparotomy
- selection of appropriate incision
- total abdominal hysterectomy
- subtotal abdominal hysterectomy
- Laparoscopic total hysterectomy
- salpingo-oophrectomy
- oophrectomy
- ovarian cystectomy
- infracolic omentectomy
- peritoneal biopsy
- repair of wound dehiscence
- Run the bowel & identify relevant bowel anatomy
- Cystotomy repair
- appendectomy
- Exposure and identification of retroperitoneal structures
 - Identification of the ureter and ureterolysis

2. Vaginal Gynaecologic Procedures

- cervical conization/ loop electrical excision procedure
- diagnostic and therapeutic excisions of vulvar and vaginal lesions

3. Other Gynaecologic Procedures

- dilation and curettage, diagnostic
- abdominal paracentesis
- repair of bowel injury

b. Surgical Procedures List B

The following procedures in List B are those that the resident in gynaecologic oncology will understand and be able to perform, though he/she may not have actually acquired sufficient skill in residency to *independently* perform them. The resident will be able to explain the indications for each of these procedures, as well as the perioperative management and complications.

1. Gynaecologic Procedures

- simple vulvectomy

c. Surgical Procedures List C

The following procedures in List C are those that the fully trained resident in gynaecologic oncology will understand but *not* be expected to be able to perform. He/she should be able to describe the principles of these procedures, the indications for referral and the perioperative management and complications.

1. Gynaecologic Procedures

- radical hysterectomy (open and robotic laparoscopic)
- radical vulvectomy
- anterior/posterior/total pelvic exenteration
- simple and radical trachelectomy
- lymph node dissection (pelvic and para-aortic)
- sentinel lymph node identification and sampling
- McCall culdoplasty
- Martius graft advancement
- fistula repair
- vaginoplasty
- hypogastric artery ligation

2. Other

- small and large bowel resection, including colostomy
- performance of bowel diversion
- ureterolysis

- line insertion for invasive monitoring or administration of intravenous nutrition

2. Communicator

2.1 General Objectives

The fully-trained obstetrician/gynaecologist must be able to:

- establish therapeutic relationships with patients and their families characterized by understanding, trust, empathy, and confidentiality
- obtain and synthesize relevant history from patients, families and/or community
- listen effectively and discuss appropriate information with the patient, her family, and other health care providers facilitating optimal health care.
- maintain clear, accurate, timely and appropriate records

2.2 Specific Objectives

To achieve these objectives the resident in gynaecologic oncology must demonstrate:

- 2.2.1 the ability to obtain informed consent for medical and surgical therapies
- 2.2.2 the ability to record accurately and succinctly data collected from patients, laboratory tests and radiological studies and to communicate (oral or written) conclusions based on these data to patients and their families, referring physicians and other involved health care personnel
- 2.2.3 evidence of good interpersonal skills when working with patients, families, and other members of the oncology health care team
 - the ability to discuss with patients the diagnosis and prognosis associated with their cancer
 - a comfort with patients and families inquiries on death and dying
 - a familiarity with available resources in the community for care of the terminally ill patient including patient right to Medically assisted in Dying legislature
- 2.2.4 an awareness of the unique personal, psychosocial, sexual, cultural and ethical issues that surround individual patients with gynaecologic cancers and their families coping with the cancer and its treatment
- 2.2.5 an ability to support the morale of the patient with compassion and understanding, and to address issues involved in terminal care
- 2.2.6 the ability to prepare and present information to colleagues and other trainees (if applicable) both informally (e.g., ward rounds) and formally (e.g., Grand Rounds, scientific meetings)
- 2.2.7 the ability to provide information to the general public and media about areas of local concern relevant to the practice of gynaecologic oncology

3. Collaborator

Definition

Residents in gynecologic oncology must learn to effectively and respectfully work with specialists in other fields, including emergency room physicians, anesthesia, diagnostic radiology, pathology, internal medicine, medical oncology, radiation oncology, general surgery, and urology, as well as basic researchers, nursing and other allied health care professionals.

3.1 *General Objectives*

The fully-trained obstetrician / gynaecologist must be able to:

- consult effectively with other physicians
- consult effectively with other health care professionals
- contribute effectively to a interdisciplinary health care team activities

3.2 *Specific Objectives*

To achieve these objectives the resident in gynaecologic oncology must be able to:

- 3.2.1 demonstrate the ability to function effectively and, where appropriate, provide leadership, in a multidisciplinary health care team, showing respect, consideration and acceptance of other team members and their opinions while contributing personal specialty-specific expertise
- function effectively at multidisciplinary and interdisciplinary group meetings such as Tumour Board and case conferences
 - team ward rounds with Gyne oncology Nurse Practitioner, pharmacy and medical students
- 3.2.2 function competently in the initial management of patients with conditions that fall within the realm of other medical or surgical specialties (radiation oncology, medical oncology, Urology, General surgery)
- 3.2.3 identify, understand and respect the significant roles, expertise, and limitations of other members of a multidisciplinary team required to optimally achieve a goal related to patient care, medical research, medical education or administration
- understand the significant role of other allied health care professionals in the provision of holistic patient care to the patient with gynaecologic cancer

4. Leader

4.1 *General Objectives*

The fully – trained obstetrician / gynaecologist should be able to:

- manage resources effectively to balance patient care, learning needs and outside activities
- allocate finite health care resources wisely
- work effectively and efficiently in a health care organization
- utilize information technology to optimize patient care, life-long learning and practice administration

4.2 Specific Objectives

To achieve these objectives the resident in gynaecologic oncology should:

- 4.2.1 be able to effectively manage a clinical and surgical practice, including the follow up of normal and abnormal test results, maintenance of patient waiting lists, and triage of emergency problems
- 4.2.2 demonstrate an understanding of the principles of quality assurance in the practice of gynecologic oncology, and be able to conduct morbidity and mortality reviews
- 4.2.3 demonstrate an understanding of population-based approaches to the provision of medical care, including the costs and benefits of the various screening tests available for gynecologic disease
- 4.2.4 demonstrate an understanding of how health care governance influences patient care, research and educational activities at the local, provincial and national level
- 4.2.5 be able to function effectively in local, regional and national specialty associations (professional or scientific) to promote better health care for women

5. Health Advocate

5.1 General Objectives

The fully –trained obstetrician / gynaecologist will:

- identify the important determinants of health affecting patients
- contribute effectively to improved health of patients and communities
- recognize and respond to those issues where advocacy is appropriate

5.2 Specific Objectives

In order to achieve these objectives the resident in gynaecologic oncology should be able to:

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- 5.2.1 identify the important determinants of health for an individual patient, highlight which determinants are modifiable, and adapt the treatment approach accordingly
 - identify “at risk” groups in gynecologic oncology and apply available knowledge about prevention to “at risk” groups within the specialty, as well as contributing to group data to further understand the health problems of this community
- 5.2.2 make clinical decisions for an individual patient, when necessary balancing her needs against the needs of the general population and against the available resources
 - identify the individual patient’s status with respect to one or more of the determinants of health (eg unemployment), adapt the assessment and management accordingly (eg the medical history to the patient’s social circumstances), and assess the patient’s ability to access various services in the health and social system
- 5.2.3 facilitate medical care for patients even when that care is not provided personally or locally or when that care is not readily accessible
 - make clinical decisions and judgments based on sound evidence for the benefit of the individual patients and the population served, allowing for an advocacy role primarily for the individual but in the context of societal needs when monitoring and allocating needed resources
- 5.2.4 advise patients with gynaecological cancer about the local and regional resources available for support, education and rehabilitation
- 5.2.5 provide direction to hospital administration regarding compliance with national clinical and surgical practice guidelines
- 5.2.6 discuss the important function and role of various professional organizations, including the Society of Obstetricians and Gynaecologists of Canada (SOGC) and Gynecologic Oncologists of Canada (GOC) in the support of obstetricians and gynaecologists in this country and in the provision and maintenance of optimal health care for Canadian women

6. **Scholar**

6.1 *General Objectives*

The fully-trained obstetrician / gynaecologist must:

- develop, implement, and monitor a personal continuing education strategy
- be able to critically appraise sources of medical information
- facilitate patient, peer and other health care professionals education

6.2 *Specific Objectives*

In order to achieve these general objectives the resident in gynaecologic oncology must:

- 6.2.1 develop a personal habit of life-long learning, utilizing information technology for referencing cases, literature review and participation in basic or applied clinical research
- 6.2.2 identify gaps in personal knowledge and skill, and develop strategies to correct them by self-directed reading, discussion with colleagues, and ongoing procedural experience
- 6.2.3 understand the principles of basic and applied clinical research, including biostatistics
- 6.2.4 be able to critically appraise and summarize the literature on a given subject, and judge whether a research project or publication is sound, ethical, unbiased and clinically valuable

7. Professional

7.1 *General Objectives*

The fully – trained obstetrician / gynaecologist must:

- deliver the highest quality of medical care with integrity, honesty, compassion, and respect
- exhibit appropriate personal and interpersonal professional behaviours
- practice medicine in a way that is consistent with the ethical obligations of a physician

7.2 *Specific Objectives*

In order to achieve these general objectives the resident in gynaecologic oncology must:

- 7.2.1 foster a caring, compassionate and respectful attitude towards patients, families, and other members of the health care team looking after the patient with gynaecological cancer
- 7.2.2 provide medical care that is ethical, and seek advice or second opinion appropriately in ethically difficult situations
- 7.2.3 monitor patients appropriately and provide appropriate follow up medical care, particularly after starting a new treatment or following a surgical procedure
- 7.2.4 maintain patient confidentiality at all times

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- identify the ethical and legal principles relating to confidentiality and access to health records, record-keeping and informed consent, including consent for autopsy
- identify the ethical and legal principles relating to autonomy, paternalism, beneficence, non-maleficence, withholding resuscitative measures, organ donation and brain death

7.2.5 complete reports, letters and summaries in a timely fashion and maintain medical records that are consistently accurate, informative and legible.

7.2.6 understand medical protective procedures and the role of the Canadian Medical Protective Association in areas of patient-physician dispute

7.2.7 be able to deal with professional intimidation and harassment

7.2.8 show self-discipline, responsibility and punctuality in attending to ward duties, in the operating room, and at meetings and other activities

7.2.9 be a moral and ethical role model for others

7.2.10 be able to appropriately delegate clinical and administrative responsibilities

7.2.8 have the ability to balance professional and personal life

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