

Overview and Innovation of Ovarian Cancer in Developed and Developing Country

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ABSTRACT

Ovarian cancer is referred as impairment due to asymptomatic existence. It is task for oncologist because of its serious health conditions. Most cancer is a crew of illness which is caused by means of multiplication or increase of cells, i.e. in out of control and spread to different a part of the body. They additionally recognized as “Silent killer” also refer as “Ovarian carcinoma”. It is a deadly disease mostly involved in women over 40 years of age or upto 55-64. It is the 6th common tumor. In 20’s and 30’s of age it is exceedingly rare to occur. Some studies recognize that, now a day’s pregnant ladies also diagnosed with ovarian cancer. Adnexal tumor is identified in most of the cases. They show that malignancy is rising in the course of pregnancy. In every year, more than 200,000 new instances are identified. Ovarian cancer often goes undetected until it has spread within the pelvis and stomach. At that last stage, it is more difficult to treat and can be fatal. Because ovarian cancer has no symptoms in the early stage’s treatment will be delayed. Its treatment will depend on stages. Surgery and chemotherapy are generally used to treat ovarian cancer. Chemotherapy was done by administration of 6 cycles of intravenous with Carboplatin and Paclitaxel along with radiation therapy and also some other drugs which used in the treatment are Metformin, Bevacizumab. Novel targeted therapies are the advanced treatment for screening and understanding of ovarian cancer. In targeted therapies mainly Nanotechnology based drugs are developed for reduction of toxicity and side effects. The article aims to analyse the recent studies and review on general information such as epidemiology, symptoms, risk factors, early detection, imaging or screening, diagnosis, staging, prevention, management and recent studies. The paper also aims to provide insight into the quality-of-life concerns of ovarian cancer patients such as how the treatment will affect the patient, how they survive, support services, society and also discuss about how the current situation COVID-19 will affect the patients.

Keywords: Ovarian cancer; Quality life; COVID-19; Diagnosis; Screening; Detection

INTRODUCTION

The methodology involves various study based on epidemiology, early detection, symptoms, imaging, staging, diagnosis, management, prevention, recent studies, quality of life concerns, impact of corona virus on ovarian cancer patients. These studies represent the condition of women suffering from ovarian cancer and analysing innovative therapies to identify and treat the diseases in early stage. In women 6th or 7th most frequent

category of malignant neoplasm is ovarian cancer and it is the 8th source of death in them [1]. Ovarian cancer can be classified into five histological sub categories. Most cases of cancer are epithelial tumours in that common type is serous carcinoma which is of two types High Grade Serous Carcinoma (HGSC) and Low-Grade Serous Carcinoma (LGSC). Histological sub categories of ovarian cancer are serous, mucinous, endometrioid, clear cell and transition cell. It has no clear screening or imaging process to detect the cancer in early stage. Due to that the

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disease is identified in last stages and it increases the cases, complication and become worldwide issues. For prognosis of the cancer many excellent therapies were introduced like, cytoreductive surgery and platinum-based chemotherapy. Recently, chemotherapy, anti-angiogenic agents and poly (ADP-ribose) polymerase (PARP) inhibitors, immunological therapies are currently being used for tests [2].

LITERATURE REVIEW

Epidemiology

During outlook of cancer one of the worst gynaecological neoplasms is ovarian cancer. However, not usual, as cervical and breast cancer [1]. Currently instances are rising to 2,25,500, with 1,40,200 deaths per year. Cases and its existence may differ by nation [2]. North of Europe, United States, United Kingdom, Russia has excessive percentage of instances, while China and Japan has moderate cases [1,2]. In 2016, around 22,280 new sufferers and approximately 14,240 deaths were recognized yearly in United States. In worldwide, 295,414 instances are determined with 184,799 mortality in 2018 i.e. the figure are 6.6 and 3.9 per 100000 [2].

Epidemiology analysis is required to conduct, generally in undeveloped country, because these evaluations will give the clarity about variation in instances and mortality as per region analysis and also to know the variation in type of neoplasm.

Symptoms

Ovarian cancer is detected in patients by followed symptoms like, bloating, pelvic or abdominal (belly) pain, trouble in eating or feeling full quickly after eating, urinary symptoms may be urgency or frequency to urinate, fatigue, upset stomach, back pain, pain during sex, constipation, irregular periods (may be increased bleeding than normal), abdominal swelling with weight loss. These symptoms also occur as common for other diseases also, it doesn't mean that having any of the symptoms indicates ovarian cancer but if the symptoms exist more than 12 times in a month then the patient should consult a physician [3]. In most of the patient's abdominal pain is the common symptom carryout by abdominal mass, abdominal uterine bleeding, and abdominal distention [4]. Few studies show that the main symptoms are back pain, eating difficulties and persistent abdominal pain and bloating [5]. Some studies shows that ovarian cancer may occur during pregnancy and they may experience symptoms same as in non-pregnant women. Such as fatigue, anaemia, nausea, vomiting, increased abdominal circumferences, constipation, shortness of breath or urinary symptoms. These occur due to late prognosis [6].

Risk factors

Factors include genetic factors, age, postmenopausal hormonal therapy use, infertility and nulliparity. These agents may raise the chance of ovarian cancer [2]. In some cases obesity also causes the ovarian cancer. Genetic factors may cause ovarian cancer in 20% women by inherited genetic mutation. Epidemiology evaluation represents that ovarian cancer evolved

is proportional to menstrual cycle. Also nulliparity, a history of breast cancer and ovarian cancer are determined as risk factor. Ovarian cancer is more common in postmenopausal age group [1]. Other factors determined as a low percentage of women by the usage of talcum powder in private area, history of IVF treatment, or having no children [6].

Early detection

Transvaginal ultrasound, CA-125 blood test, CT scans, MRI scans, Positron Emission Tomography (PET) scan are the tests used to examine the cancer. By conducting pelvic test, it is helpful to found cancer at an early stage. It is rare to find or difficult to find at early. By using these detection technique professional recognize the shape, size, consistency of ovary and uterus [3]. Most of the cases are recognized in advanced stage where it already proliferates to other part of the body [1].

Screening

For timely prognosing the diseases, techniques are expensive but still today there is no appropriate effective screening programme. Screening techniques will not identify malignant neoplasm at early stage [7]. Since from 1980's many attempts have been undertaken to progress the screening strategy to decrease the cases, mortality rate and to find disease in early condition [8]. There are many techniques for screening such as CA-125 blood tests and radiographic imaging like Transvaginal ultrasonography, CT scans, PET and MRI scans. Some tests like CA-125 blood tests are not much more functional when used alone. Screening techniques are more opposition as the technique will not identify disease in early stage because the disease involves histological subtypes with variety of biological and clinical properties. Pelvic examination, Transvaginal ultrasonography and serum cancer antigen 125 (CA125) are the current screening methods which is having less effect on reducing mortality. In this article professional talk about advancing liquid-based close in on for better early detection of ovarian cancer. Liquid based biopsies are used as molecular tools for detection. This examination is not new, although it detects cancer. These studies help in prognosis of blood disorder like complete blood cell counts, involving white and blood red blood cells and platelets also involves leukaemia and lymphoma. These studies help for further targeted therapy and immunotherapy as source for mutation analysis. In upcoming years this liquid based biopsies screening method will become clinical tool for detecting, diagnosing, prognosing, evaluation and diseases identification [9].

Diagnosing

Consistently, at late stage the cancer is prognosed i.e., 3rd or 4th stage with specific symptoms, the disease is prognosed by body evaluation or symptom analysis in patient which involves imaging or screening methods. Those techniques present or analyse the ovarian mass, size, shape, complexity, which identify the cancer [2]. Some recommend that biopsy should be conducted to prognose the ovarian cancer. Histopathological evaluation with some specific special stain and immunochemistry for detecting the diseases and its types. Stains

such as hematoxylin and eosin stain. For diagnosing the diseases, imaging has an important role in preclinical as well as in clinical management. Imaging involves-MRI, nuclear imaging, optical imaging, ultrasound, PET scan, imaging or screening has 2 significant role i.e. prognostic tools to identify the patient tumor and thernostic tool for personalized targeted treatment selection [10]. By pelvic evaluation or other screening test imply that the patient having ovarian cancer then the patient needs a specially trained gynaecological oncologist as they provide best treatment for the patient imaging test also involves barium enema-x-ray, chest x-ray, other tests like laparoscopy, colonoscopy, biopsy, and molecular tests for gene changes. Molecular tests include BRCA 1 and BRCA 2 gene mutation, MSI (Micro Satellite Instability) and MMR (Mismatch Repair) [3]. As the study represents that 79% of patients are prognosed only in advanced stage such as, malignant ovarian tumour, then age and menopausal status, tumour stage and size features of neoplasm by imaging, presence or absence of symptoms, value of tumour marker are the related factors for diagnosis. As possible it should detect in early stage because only in stage 1 cancer is curable [7]. In case of pregnant women now they also prognosed with ovarian cancer. They may be detected by amnesis and clinical evaluation this may be tough during pregnancy. It should be conducted without any restriction. In pregnant and non-pregnant women symptoms are similar. Imaging tests may be common. The pelvic examination of masses in non-pregnant women includes International Ovarian Tumour Analysis (IOTA). IOTA screening is help in detection of cancer but it is not yet been prognosed in pregnant women. Due to some teratogenic effects, CT scan is not suggested in the course of pregnancy [5]. The physician must not forget to take a record directed to Adnexal tumour and perform a bodily exam which include virtual rectal, and vaginal exam that is critical to grow the opportunities for preliminary surgical procedure.

Staging

Ovarian cancer is very crucial to recognize, based on the natural history and it's multi-functional in origin and the affected person will be also predicted the loss of life due to its metastatic nature. There are 2 staging system A) AJCC-American Joint Committee on Cancer or B) FIGO-International Federation of Gynaecology and Obstetrics. Ovarian cancer is divided into 4 stages and except stage 4 remaining 3 stages divided into 3 subtypes like A, B and C. Stage 1: It has been found in one or both ovaries and 15% of ladies are recognized with stage 1. They are classified as, Stage 1A: Found in single ovary. Stage 1B: In both ovaries it was found. Stage 1C: It is found inside one or both ovaries. Stage 2: 19% ladies are recognized by stage 2 which is found in one or both ovaries and spread to other part such as pelvis. It is classified into three sub divisions, Stage 2A: It has spread to the uterus or fallopian tubes. Stage 2B: Spreaded to other tissue inside the pelvis. Stage 2C: It is found inside one or both ovaries and has spread to other the uterus or to tissue inside the pelvis, or outside surface of ovaries. Stage 3: It spread not only on both ovaries, it spread through outside the pelvis, to other regions of abdomen and nearly lymph nodes. 60% of cases are diagnosed when they are at stage 3. They subdivided as, stage 3A: Tumour is found in the pelvis only, but cancer cells that can

be seen only with microscope. Stage 3B: The cancer spread to the peritoneum and it is of 2 cm or smaller. Stage 3C: It also spread to peritoneum and is larger than 2 cm and spread to lymph nodes in the abdomen. Stage 4: When a woman recognized with stage 4 the cancer has spread beyond the abdomen to other parts of the body such as lung or tissue inside the liver. According to the FIGO for ovarian cancer maximum are identified with domestically superior and metastatic sicknesses. In keeping with FIGO 1) Stage 3: The tumour includes one or each ovary with effective peritoneal implants outdoor the pelvis or retroperitoneal or inguinal fine nodes. There is a superficial liver metastasis. The tumour is constrained to the small intestine. 2) Stage 4: The tumour includes one or each ovary with remote metastasis. There is pleural effusion fluid, advantageous through histology and liver parenchymal illnesses [11].

Prevention

Although oral contraceptive pills are not suggested for decreasing the risk of primary ovarian cancer. It does supply it additional benefit for those who use it for contraception or other medical demonstration. For moderate high-risk hang on the spectrum of harm. Chemo preventative strategies are finest target. Currently aspirin is given as chemo preventive agent for women with high-risk lynch syndrome. It will reduce the risk of colorectal as well as ovarian and endometrial cancer. Physician or health professional should discuss with patient about the risk, usefulness and recent restriction [11]. By some current studies they present that the neoplasm start from the site of fallopian tube of fimbrial end. In British Columbia, Canada, now salpingectomy is used as preventive strategy [4]. Among other things it is suggested that all women with ovarian cancer undergo genetic testing and genetic counseling. The prevention method not suggested for everybody. There is no known was to prevent ovarian cancer but those things are associated with a lower chance of getting ovarian cancer.

Management

Somehow the physician will handle the patient by treatment to overcome as soon as possible. The therapies used in ovarian cancer aim to minimize the case of cancer and mortality rate [2]. For giving the best treatment the physician will observe or depend on their age, status of condition, stage identified, tumour size, shape or any other issues. Here many treatments, surgery, chemotherapy, medication and radiotherapy are included to handle the ovarian cancer patients. Specific guidelines are not there for pregnant women they undergo therapies same as non-pregnant women. They hang on some agents like course of pregnancy the common state of mother and foetus and whether the women are preferred to pursue the pregnancy or not. To handle the women ovarian cancer with pregnancy is still dare for physician. A multi-disciplinary team is required [5].

Life concerns of ovarian cancer patients

There are many difficulties and the quality life is a part of treatment and post treatment imaging in women with ovarian cancer.

Support services

Ovarian cancer patients will get supporting services from many people other than physician and nurses to take care of the patient. Support services such as,

Case manager: For each individual patient they will assist a case manager to maintain the case history of the patient also manage the patients discharge from hospital, set up outpatient services needed and helps in co-ordinates insurance issues, setting up physical therapy appointments.

Patient advocate: Advocate will help the patient if they have as they know ins and outs of the institution.

Nurses: Here nurses can't assist for individual patient. They will have network of patients.

Nutritionist: Nutritionist will deal with all type of patients having ovarian cancer. They advise the patient about their living style their diet nutritional needs and health benefits.

Social worker: They may help with financial concerns, job related problems and help in decision taking.

Psychiatrist: They will deal with patient having emotional aspects of cancer diagnosis and therapy, depression, anxiety.

Physical and occupational therapist: Physical therapist will help in physical problems such as walking, performing household tasks after recovering from an extensive surgery.

Importance of gynaecologic oncologist: They will be specially trained to take care of women with gynaecological cancers. They will do surgery and administer chemotherapy. All women should seek the care of a gynaecologic oncologist if they are concerned about cancer.

There are so many consequences that will effects the patients and their life such as,

Treatment related side effects: During treatment it involves surgery along with chemotherapy. As patients undergo the therapy they feel physical, emotional or psychological problems. After the surgery patient may suffer from loss of fertility, surgical menopause, bowel obstruction, sexual concern. When chemotherapy medication starts, they will initiate to attack on fast dividing cancer cell but sometimes they attack on the healthy cells in body then that will lead to adverse effects. Medication side effects are gastrointestinal side effects includes mouth, throat, stomach, small and large intestine these involves symptoms like nausea, vomiting, and loss of appetite. Other side effects are taste bud changes and loss of appetite, peripheral neuropathy. Some patients feel difficulty in writing, speaking, slowed thinking ability, i.e. known as chemo brain problems like Alopecia, Neutropenia, Anaemia, Myelosuppression, Thrombocytopenia, are caused by chemo brain other than chemo brain it may cause depression, anxiety, and distress. To overcome depression, anxiety and distress, people must do

relaxation exercise, physical workout, get out and get some fresh air, do something fun which will give relax the mind. If the patient feels any of the symptoms like depression, anxiety then they should discuss with doctor or psychiatrist. Other concern of the patient may be about financial, sexuality/intimacy/relationship, end of life concerns, complementary and alternative medicine, nutrition, spirituality.

Financial concern: It is the major source of stress for the patient. It may relate to employment, health insurance, travel and hotel expenses. If the patient choose to travel for their treatment then they will concerned for travel expenses, social security and disability insurance.

Sexuality/intimacy/relationship: Women with ovarian cancer life after cancer involves understand to cope with many long term sexual issues. They are having many sexual difficulties like decreased libido; vaginal dryness and pain during intercourse are the most prevalent. These difficulties is caused by surgical or treatment that can relate menopause, disturbance to the body image and increased psychological distress. They are shy to discuss about these difficulties with physicians.

End of life concerns: Many ovarian cancer women afraid about their life. They will worry about dying before or after of their surgery or during treatment. While other don't start to think about it until they undergo multiple chemotherapy regimens.

Complementary and alternative medicine: These are still some disruption regarding variance between complementary and alternative medicine. They are the non-conventional therapy such as acupuncture in merger with conventional or standard therapy. They proceeds towards like yoga, touch therapy, massages, meditation and relaxation therapy as well as acupuncture it will relief the same side effects of the therapy, these may help to better the life of women with ovarian cancer, which will build up personal care, decrease the pain, anxiety, depression and also relax the mind.

Nutrition: During the treatment patient should consume a healthy balanced diet, they must eat plenty of fruits, vegetables and drink lot of water. Healthy diet is not only for the diseased people it is suggested also for normal people. Balanced diet should involve protein, fiber, fruits and vegetables. Nutritionist also suggests taking multivitamin in course of chemotherapy. During the therapy oncologist will recommend Nutritionist as they need special dietary plan to cope with the medication.

Spirituality: It is not based to religion people often think about the term spirituality is related to religion. But here spirituality defines about a person's view of life, how they connected with other people, their purpose of life, sense of peace. Women build up their interpretation with religion or through spirituality. This may help women to cope with treatment in turn they will attach emotionally to other people which may help in healing process of diseases [12].

Recent studies

Many studies include microarray, spectrometry, salpingo-oophorectomy and biomarkers, bioinformatics equipment's, CA-125 blood tests, surgery with chemotherapy are used for

treatment, diagnosing, imaging, screening of ovarian cancer. And also, many drugs approved by FDA. Still many researches are going on to get best treatment for ovarian cancer may include,

Some articles show the therapy with PARP (Poly ADP-Ribose Polymerase) inhibitors are creative and its outcome is excellent action with EOC (Epithelial Ovarian Cancer). At various stages of diseases PARP act as it best option but still some few studies are needed to fulfil its activity towards secondary resistance of PARP in EOC. Olaparib, Niraparib, Rucaparib, Talazoparib, Veliparib, are the drugs which are used to test their mechanism of action, pharmacokinetics, clinical activity, indications. Through these tests researchers they get to know the clinical benefits for patients [13]. Some articles represent microRNA studies, which has come out with encouraging non/ minimally intruding cancer biomarkers for better prognosis, therapeutic applications. In throughout the decades they tried to evolve, moderately simple, fast, and costless microRNA biosensor. Through this paper they outline the important role of microRNAs in ovarian cancer as well as modern proceed in the evolution of nanotechnology-based, optical and electrochemical biosensing plan for miRNA detection. Lots of recent innovations such as novel nanoparticles, advances in micro and nano scale, fluid handling platform and electrochemistry can revolutionary changes in ovarian cancer management plan by enabling low cost miRNA analysis close to patients [14]. In fact, the miRNA analysis acquired evaluating distinctive Histo types of ovarian carcinomas with the ordinary tissue are overlapping in maximum case however; additionally, they screen variety of miRNA that appear to be Histo type specific [15]. On a combination of platinum and taxane for ovarian cancer as first line chemotherapy. They used gene array method, aimed to detect the potential predictive biomarkers that should response in combination treatment. They capable of finding the drug responses in 8 genes. They validated a limited set of biomarker candidates by RT-PCR and identified the genes correlation with chemo resistance [16]. Several papers also aim to identify the most effective group of targeted therapies for ovarian cancer. There was a jump in the clinic experiments with drug that specifically target signal enzymes prevent apoptosis and angiogenesis in site-specific ovaries cancer cells. However, they promise to be more designed an effective protocol for treating the diseases. Verification of ovarian cancer as a short-term treatment enriches cancer cells with chemotherapy. The remaining cancer generates a stem cell (CSC)-like population tumour weight and anti-mitotic side effects on normal cells during chemotherapy prompted to explore better treatment strategies for the treatment of ovarian cancer [17]. In this article they subject on an illustration of those Chimeric Antigen Receptors (CAR) that have been substantiate in the clinic. Car therapy is simple and efficient. It will face a barrier to clinical efficacy: TME (Tumour Micro Environment). The report of ovarian cancer TME clearly introduce that even the most efficient CAR cannot be fully applied therapeutic effect on its own. Immune system TME needs to be deal with encouraging solution are available is being developed [18].

Impact of COVID-19 on ovarian cancer patient

Corona Virus Disease (COVID-19) is an infectious disease caused by a newly discovered corona virus. New pandemic COVID-19 activate by using the novel corona viruses SARS-COV-2 has not only ruin the human health but also posed substantial impact on the social, economic and geopolitical conditions. The corona is caused by the severe acute respiratory syndrome (SARS-COV-2). During a rising infectious sicknesses pandemic, the prospect of being infected, in addition to the illnesses it influences scientific selection making in numerous methods, summarized and provided. There is no data, how corona virus affects the cancer patients. There is a high risk among cancer patients with this corona virus. Also, there is a chance to evolve a further critical condition. Anyway, by cancer and its treatment their physical strength and immune system is decreased or weakened. And most of the treatment such as bone marrow transplants, chemotherapy and radiation therapy are also at high risk, because long-lasting effects of past therapy [19].

COVID-19 pandemic has created different dare in providing timely care to our patients. These dares are particularly tough for cancer diagnosed patients and care providers for those ones. Special consideration is needed to assess the appropriateness of the procedure's interventions identify the vital resources that they need. Some consideration should employ to protect themselves and their patients during this pandemic in the course of surgery and treatment. Should involve like social distancing, the physician can contact the patient by virtual through telecommunication, while in hospital doctors can use PPE kit, sanitizing-themselves, patients, hospital surroundings, washing hand, keeping surroundings hygiene [20]. The patients and health care professionals facing many problems in course of COVID-19. Mostly like in their care, hospital visits, tests, imaging studies, treatments and surgeries. There should be a plan to focus on support services and there should be a management of COVID-19 for achieving better health for patients [21]. As they want to pursue best quality of medical services to their patients, at the same time they have to give safety not only for patients and their families also for medical staffs, and all associated team that care for patients. So, to manage in the course of this crisis health care established some guidelines to cope up with ovarian cancer patients such as, by doing contact through telecommunication, if necessary and then only visit hospital, they made guidelines for all types of patients like local, distant, as well for international patients. In this pandemic also the patients are getting supportive care management by their health team [22]. Several studies are conducted as survey during COVID-19 pandemic. In India, they conducted a nationwide survey and as well a survey through social media. Through social media they conducted a survey which consists of 20 questions, which give their recent practices and approach to their patients. COVID-19 pandemic has affected the therapy of ovarian cancer patients, professional is trying to reduces the destruction by integrate new one's factors appropriate to the current situation [23]. A major disruption in health care and practice were caused worldwide due to COVID-19 pandemic. Around 212 countries and territories were affected with this corona virus. Among health care professional an online survey was conducted in care of

gynaecology cancer patients in first week of May 2020. The query contains six sections: introduction, general question, endometrial cancer, cervical cancer and vulval cancer. 153 responses they got, in that 5 responses had double entries [24]. Chemotherapy treatment restarted in ovarian cancer patient's prognosed with COVID-19. A case study was conducted in 60-year-old women. As they feel fever, pain in right chest. 20 months ago, she prognosed with stage 3. It is the first case, which present that, it was at a comfortable stage that chemotherapy was restarted in course of COVID-19 infection without any difficulties. Also in France, a study was conducted that patients undergo chemotherapy had decreased the rate of SARS-COV-2 antibodies. By this study can imply a better health for patients through preventive measures that can lower the further infection, and they should identify the risk factors and treat the patient [25]. In Japan corona have risen because the first case was started on January 24, 2020 and 6225 infections were pronounced as of June 30, 2020. On April 8, 2020, their clinic commenced screening sufferers *via* pre-admission opposite Transcriptase Polymerase Chain Reaction (RT-PCR) for extreme Acute Respiration Syndrome Corona virus 2 (SARS-COV-2) and chest Computed Tomography (CT). Although no sufferers based at the consequences of screening assessments in the course of a rising infectious ailment pandemic, the probability of being infected, in addition to the sicknesses itself influences medical selection making in numerous approaches summarized. Some paper provides information of intolerance of uncertainty and few of COVID-19 psychological discomfort in relation with ovarian cancer women. Some medication model and post hoc linear regression analyses were utilized to observe the role of predictor variables in psychological discomfort. It is a cross sectional quantitative design. After examining they concluded that they are not hold up their consequence because it is connected with anxiety, stress and depressive symptoms.

DISCUSSION

Ovarian cancer is a common malignancy in women. Where some are not cancerous (benign) and some are cancerous (Malignant). It can originate from the epithelium surface, germ cells. Majorly it occurs in lining of the ovary. A plateau has been reached concerning the advantages related to intravenous management of cytotoxic chemotherapy in epithelial ovarian cancer. However, advance in screening, novel focused remedies and huge use of intraperitoneal drug transport strategies will likely enhances affected person consequences. The huge countrywide survey confirms that the-majority of ladies ovarian carcinoma is symptomatic and regularly has delays in analysis. North of Europe, U.S, U.K, Russia, Canada has highest percentage of cases, where China and Japan have moderate cases. Epidemiology evaluation should be done in developed as well as undeveloped country, because from that outcome professional can predict the new cases, existing cases and mortality rate. Now a days, ovarian cancer also recognized in pregnant women. The symptoms might be similar like in pregnant women bloating, pelvic or abdominal (belly) pain, eating difficulty, urinary symptoms, fatigue, upset stomach, back pain, pain during sex, irregular periods are the symptoms. If the symptoms exist more than 12 times in a month then the women

should consult a physician. Many screening and imaging techniques are there to detect the cancer. The test includes CT, MRI scans, CA-125 blood test. They also identify the Histotype. Still many researchers are going on to find the cancer at early stage. It is difficult to find in early stage almost all cases are found in stage 3 or 4. Only in stage 1 cancer is curable physician can recognize the stage after screening or imaging. Many preventive measures are taken to manage the cases. By providing best treatment and medication, there are many life concerns of the women with ovarian cancer. Although they are having many supports term surroundings they will think about these issues. Some women are always afraid to get treatment or some are mainly concern about their financial stability. So the women need a mentally and physical support from their loved ones. As they have to stand strong and to fight with the diseases. Recent innovative studies are still under search and some of they are very effective and helpful to treat the women in beneficial manner. Many drugs combinational studies, PARP Inhibitors Activity, CAR therapy, MicroRNA techniques, Targeted therapies, Salpingectomy, Microarray are the studies. Many Biomarkers, Bioinformatics Equipment's, CA-125 blood test is already discovered. As the new pandemic rose, it becomes difficulty to patient as well the health team. Although it is difficult to consult, the health team is providing best method to treat the patient. They can manage and provide the treatment to existing patient, But to recognized new cases is difficult still they are managing. Many guidelines are established to cancer patient and for health team to provide best therapy to the patients.

CONCLUSION

As we analysed overview on recent innovation of ovarian cancer. Previous ovarian cancer is not presented using an effective research method. Later many studies approached the effective method for determining, diagnosing, treating the ovarian cancer. Advanced screening and understanding of molecular pathogenesis of ovarian cancer and development of novel targeted therapies, tumour markers are used for identification. Multiple studies involve the role of microarray method, mass spectrometry, Salpingo-oophorectomy. Many concerns bother the women in the diseased situation about their financial stability, treatment, medication, afraid about surgery, test changes in their life styles. But still, they have to stand strong and fight with the diseases. They need support from health team, family, society to overcome the cancer. Although they are getting goof support from everyone, still they have these types of concern, which may affect the further procedure. As new pandemic COVID-19 arise, it become highly risky for cancer patients. However, there is no more knowledge about how the SARS-COV-2 will affect the Gynaecological oncology. So, they should take or follow general preventive measures such as, they should consult their doctor on information specific to their condition, stock up on necessary medication and supplies that can last for a few weeks, avoid crowds and non-essential travel, stay at home as much as possible. All types of ovarian cancer are treatable if a person receives a diagnosis in early. When considering survival statistics for ovarian cancer, it is also worth noting that medical advances have been improving the outlook over the 20 years.

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