

HISTORY OF ONCOLOGY

Uterine cancer through the works of the eccentric Auguste Joseph Lutaud (1847-1925), famous gynaecologist, publisher and intellectual of the 19th century

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Summary

Auguste Lutaud was standing for almost half century in front of the French and International stage for his controversy and eccentric personality, his undisputed authority in gynecology, his writings and his publishing success. Thanks

to his writings, he is considered as the main propagator of the prevailing ideas on uterine cancer diagnosis and treatment.

Key words: editor, eccentric personality, gynecologist, Lutaud, uterine cancer

Introduction

Uterine cancer was one of the most prevalent neoplasms reported in Western Europe during the mid 19th century. With the increasing safety of surgery as a result of anesthesia and antiseptic procedures and with the development of pathology and surgical techniques, surgeons could successfully intervene in most cases of uterine cancer. As a result, radical hysterectomy was successfully performed vaginally by Conrad Langenbeck (1776-1851) in 1813 and later on in 1898 abdominally by the Austrian gynecologist Ernst Wertheim (1864-1920), saving thousands of lives.

During that period the treatise *Manuel des maladies des femmes clinique et opératoire* [1] of the eminent French gynecologist Auguste Lutaud reflects his ideas and those of his contemporaries on uterine cancer.

His life and carrier

Auguste Lutaud was born in 1847. He practised gynecology at Saint-Lazare hospital in Paris and was a founding member of the French Society of Obstetrics and Gynecology.

In 1880 he founded the *Journal de Médecine de Paris* which was considered as the official organ of the Paris medical societies. He was also manager of *Revue obstétricale et gynécologique* [2]. He spent a long time

in London practising medicine and he became member of the abolitionist movement. In 1894 he left for United States and Antilles as a representative of the French Ministry of Health in order to teach medicine and gynecology in medical schools [3]. He published numerous treatises mainly on gynecology and obstetrics and various others on sexology, legal medicine, infectious diseases and hospital organization, representing the 19th century conception of diseases and the development of surgical techniques (Photo 1). Among them it is worth mention-



Photo 1. Portrait of Auguste Joseph Lutaud.

ing: *Du vaginisme* (1874), *Traité de la fièvre typhoïde* of Ch. Murchison, translated by A. Lutaud (1878), *Traité pratique de l'art des accouchements* (1882), *Traité clinique des maladies des femmes*, of G. Thomas, translated by A. Lutaud (1882), *Leçons de gynécologie opératoire* in collaboration with Prof. Vulliet (1890), *Étude sur les hôpitaux d'isolement en Angleterre*, in collaboration with doctor W. Hogg (1890), *La stérilité chez la femme et son traitement médico-chirurgical* (1895), *Consultations sur les maladies des femmes* (1895), *Manuel des maladies des femmes clinique et opératoire* (1895), the famous *Médecine anecdotique, historique et littéraire* published by Lutaud in 1906 under the pen name Doctor Minime and *Les causeries de Lourcine, études de psychologie sexuelle* (1920). He used his pseudonym several times to publish his fanciful poetry [4] and his militant causes. Also he was a great partisan of Neo-Malthusianism; a population control policy using birth control and/or abortion [5]. Moreover, Lutaud was considered to be the most vociferous opponent of Pasteur and his rabies' vaccine. In 1886 he published in *Journal de Médecine de Paris* his article *Études sur la rage et la méthode Pasteur* in which he criticized Pasteur's inoculation method for rabies and its possible danger in humans, provoking a series of disputes and discussions in the medical community [6].

Except his medical and surgical skills, Lutaud was known for his eccentric way of living. In 1897 he won in a card game from a certain Monsieur Sergeant the Île d'Or (Gold Island), a tiny island located in French Riviera. He constructed a replica of a Saracene tower and, satisfied from the result, he proclaimed himself Auguste I, King of Île d'Or. He also coined money, emitted stamps and organized a sumptuous coronation reception. He died in 1925 and he was buried on his island with great ceremony. Lutaud's tower became the inspiration for *The Black Island* in Hergé's *The Adventures of Tintin* [7].

Histological conceptions on uterine cancer

In the 19th century, uterine cancer was a disease characterized by extreme proliferation of connective tissue and an excessive production of epithelial cells, a description applied also to all types of body carcinomas. Regarding uterine cancer, it was pointed the facility with which the neoplasm was destroying the tissues and was extended in the nearby organs.

Ancient authors had some clinical notions on the uterine cancer but it was during that period that scientists obtained satisfactory notions only on the nature of this disease, as its etiology and treatment remained in darkness.

After Lutaud, all types of malignant and benign neoplasias could develop in the uterus. However sarcoma, epithelioma and carcinoma were the three main histological types that could be found [8].

According to Dr. H. Choupe (1848-1894), editorial member of the *Bulletin Médical*, the uterine sarcoma is rare and its fasciculate type is the most common; it resembles to myoma and could be distinguished only by an attentive examination and especially by the use of fuchsine that colors intensely the muscular fibers. Dr. Choupe also believed that histologically sarcomas get closer to cancer but tend to go away by their clinical characteristics [9].

Epitheliomas were frequently observed on the uterine mucous membrane (Figure 1). Two varieties have been described: the pavemental and the cylindrical. The first one was considered to arise from the vaginal portion of the cervix; it penetrated then into the uterus and replaced little by little the muscular tissue that eventually disappeared completely. The pavemental epithelioma presented some characteristics that could be recognized by the naked eye like its low vascularity and its opaque, waxy aspect. Gradually, the epithelial cells were undergoing a granulo-greasy transformation and ulcerations were produced to give rise to hemorrhages observed during the course of the disease [1,10].

Lutaud mentions that the cylindrical epithelioma had some peculiarities in structure; while the pavemental tumor was formed of small flattened cells with nucleus forming epidermal globes, in the cylindrical epithelioma the cells were rather large and rarely formed epidermal globes [8].

Finally, the carcinoma was the most common and most serious type of uterine cancer as it was spreading rapidly, creating pains and big hemorrhages. It was located in the lips of the cervix that were becoming hypertrophic and presenting soft vegetations on their surface.

Lutaud underlines that carcinoma of the uterus

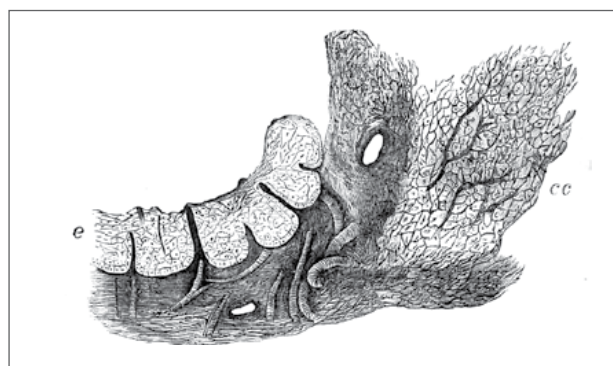


Figure 1. Histological section of a cervical malignant epithelioma; e represents the pavemental epithelium and cc the cancer cells.

has a high tendency of destruction, extension and dissemination; the metastases appear mainly in the lung and the liver [1].

Causes of uterine cancer

Lutaud, like his contemporaries, didn't know the exact etiology of uterine cancer. His research demonstrated the high frequency of the disease in menopausal women. The causes that were attributed were the excess of sexual intercourse and the repeated childbirths [11]. Heredity was also mentioned, but the eminent pathologist Hermann Lebert (1813-1878) [12] and the gynecologist Robert Barnes (1815-1892) [13] denied the hereditary transformation of normal cells into cancer cells.

Some scientists admitted the influence of the inflammation and trauma in the etiology of carcinoma and Lutaud accepts that any phenomenon capable of provoking a certain irritation in the uterus can become the occasional cause of the neoplasm. This opinion was based on the fact that tumors affect rather the neck of the cervix, the part of the organ most exposed to external factors [10].

Symptoms and signs

According to Lutaud, the disease may initially progress without giving any symptom. When the symptoms appear they can be divided into objective and subjective. The first ones are of great importance because they allow recognizing the disease at the beginning, while surgical operation is still possible. However, the negligence and the modesty of the patients often make them pass unnoticed.

Only the physical symptoms could help the physician in a certain diagnosis and they belong unfortunately to the period of ulceration. The most important among them are hemorrhages and discharges.

Pain was observed always in advanced disease, when the nerves were affected.

Initially the patients had a feeling of tightness in groins or loins and they used to complain about a discomfort in the perineum and the sacral region [11].

Amédée Courty (1819-1886) insists particularly on the absence of the pain during the initial stage of cancer [14].

Hemorrhage was a very common symptom and as Hermann Lebert said: "Every time that hemorrhages occur, not in the context of pregnancy or menstrual cycle, we have to think on uterine cancer even if we did not notice uterine fibromas or polyps" [12].

And Lutaud continues: "At the same time of me-

trorrhagies, we observe a plentiful mucous discharge which at the beginning is serous and has no smell, but at the end it gets a gangrenous smell. When the lesion is advanced and the neoplasm has reached the nearby regions, we observe distant symptoms. The most frequent is peritonitis provoked by the adhesions that immobilize the body of the uterus. However, the disease can invade the bladder provoking dysuria, stranguria and urinary retention, and the rectum. Ganglions and lymphatics are affected too and as a result phlebitis and phlegmasia alba dolens may occur. Finally cachexia appears" [1]. The famous English gynecologist and obstetrician James Young Simpson (1811-1870) published a case where cancer had blocked the orifice of the uterus and provoked an enormous dilation of the organ [15]. Although scientists believed that uterine cancer, even in advanced stage, was not an obstacle to conception (as several cases of pregnancies during the course of a carcinoma indicated), finally they had to conclude that pregnancy and childbirth may activate the course of cancer (Figure 2) [11].

Signs on cervical touch

After Lutaud the cervical touch is generally sufficient to recognize the physical signs of the disease; however, it must be performed with caution because it often provokes hemorrhages, especially in advanced stages. The speculum examination must be done only at the beginning of the disease, while it is important to specify the diagnosis and propose a treatment. The cervical signs are variable according to location, nature and degree of the neoplasm evolution. At the begin-

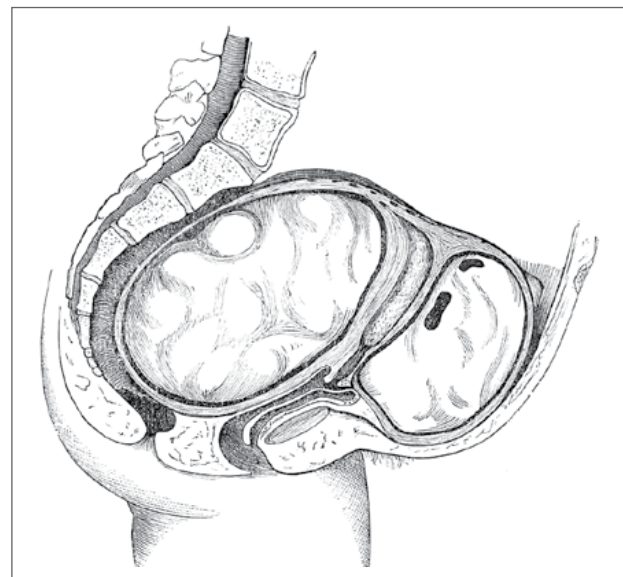


Figure 2. Two-month pregnancy complicated with uterine tumor.

ning, hardness of the cervix surface and the presence of masses, extra growths and pedunculated vegetations could be noticed and produce ulcerations easily detected by finger. Finally, when the ulceration goes in depth the neck of the uterus is transformed into an irregular tumor, that gives to the finger the sensation of a granular bloody mass [10].

Lutaud mentions that cancer's differential diagnosis is easy during the end stage, but it is not the same at the beginning when the lesion presents only a light tissue hypertrophy that can be confused with cervical inflammation, ulceration and polyps of benign etiology. Polyps may have a similar sensation with cancer in cervical touch and produce also hemorrhages and fetid flow and he believes that histological examination will be of great importance and the duration of the disease will provide a significant element as the carcinoma is fatal in less than two years [8].

Treatment

After Lutaud, oral medications like tonic elixirs, could support the patient and narcotics could diminish the pain. Morphine in subcutaneous injections was considered as a first line pain killer [16].

Surgical treatment was also proposed having as main goal to remove completely the affected tissue and to prevent recurrence.

Surgeons tried different therapeutic approaches such as destruction of tissue by caustic substances, curettage, ablation and hysterectomy.

The destruction of the cancerous tissue by caustic substances was the preferred method of gynecologists. But Lutaud points out that a caustic substance may affect also the healthy parts and give rise to adhesions and inflammations that can aggravate the course of the neoplasm. However, when the tumor is limited and when the patient refuses ablation, they can be applied with some chances of success. Caustic substances used for the destruction of cancerous tissue at the neck of the cervix were acids, acid nitrate of mercury, the caustic substance of Filhos, the paste of Canquoin, and also the galvanocautery and the thermocauter [17].

At the mid 19th century, Franz Vulliet, Professor of Obstetrics and Gynecology at the University of Geneva, introduced with success his "method of dilation". This method allowed visualizing the cervix, excising the cancerous tissue and applying then a chemical cautery agent like potassium hydroxide and zinc chloride. Lutaud believed that caustic substances find only rare applications in the treatment of the uterine cancer and it is better to be used in the first stage of the disease.

As for curettage, Lutaud mentioned that it was a recommended procedure for epitheliomas and could considerably decrease the hemorrhages, remove the purulent masses and delay the course of the disease. The 19th century gynecologists used the Simon's cutting curette, or the flexible curette of Sims. The curettage was followed always by an aseptic irrigation and by an iodoform tamponade [18].

For cases of limited uterine carcinomas gynecologists used to practise local excision of the affected tissues according to Jack Sims' (1813-1883) method. After removal of the lesions Sims dabbed the vagina with absorbent cotton dressing, soaked with a haemostatic solution (solution of iron sulfate a part for two of water). After an interval of 5 days, he removed the vaginal tampon and applied to the wound cotton dressings soaked with a solution of zinc chloride (4 grams of zinc chloride for 30 of water). The vagina was then dabbed with tampons soaked with a sodium bicarbonate solution [19].

Sims' procedure was applied by Lutaud in 12 cases of operated uterine cancer with great success [10].

The complete or partial amputation of the cervix was highly recommended by gynecologists. Already practised by Ambroise Paré (1509-1590) and the surgeons who followed him, it was carefully described by Jacques Lisfranc de St. Martin (1790-1847) and later on by Pierre Huguier (1804-1873) and Sims [20]. The amputation of the cervix was especially indicated for the first stage of epithelioma (Figure 3), when the tu-

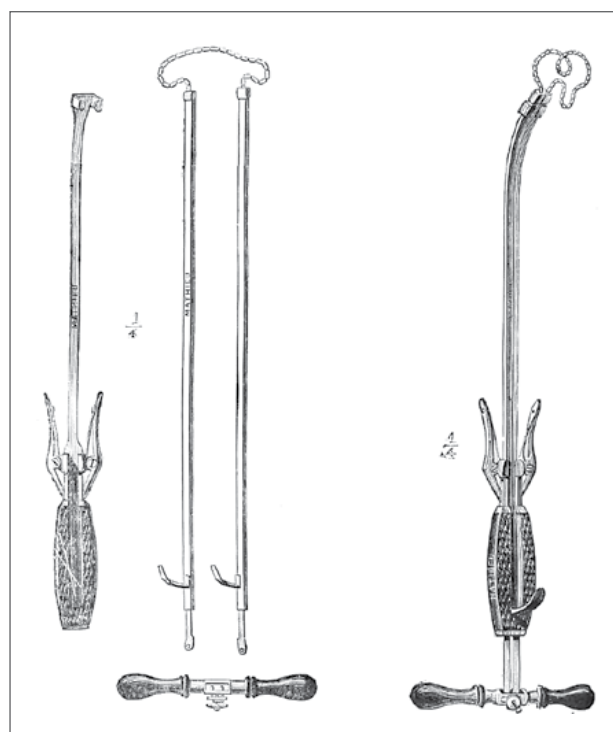


Figure 3. Surgical instruments for cervical amputation.

mor was limited to the cervix. The removal of affected tissues, either by partial excision of uterus or by hysterectomy was considered as the most effective therapeutic approach that could prolong patients' lives from a few months to mostly, at that period, four years. Total removal of the uterus, or abdominal hysterectomy, was proposed in cases where cancer had invaded the totality or occupied only the body of the organ [18]. Practised at the beginning of the 19th century by famous surgeons and gynecologists like Philipp Siebold (1798-1866), Bernhard Langenbeck (1810-1887), Joseph Récamier (1774-1852), sir Thomas Wells (1818-1897) and Eugene Koeberlé (1828-1915), this operation, considered at the beginning as unsuccessful, became a gold standard thanks to the introduction of antiseptic methods and was adopted by a large number of surgeons like Ernst Wertheim who is credited for the first successful abdominal hysterectomy in 1898 [21]. Total removal of the uterus by laparotomy was less practised. Finally, according to Lutaud, vaginal hysterectomy, a procedure successfully performed in 1813 by Conrad Langenbeck, seemed useful in cases where the epithelial tumor was small-sized and limited to the cervix [18].

Conclusion

Auguste Lutaud, as Professor of Gynecology, founding member of the French Society of Obstetrics and Gynecology, editor of *Journal de Médecine de Paris*, author of many treatises not only in gynecology, as his famous book *Médecine anecdotique, historique et littéraire* written under the pen name Dr. Minime and his eccentric personality, monopolized for decades the scientific world and the general public of his time. Among his achievements in medicine it is worth mentioning his important contribution in the research and treatment of uterine cancer.

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