



GYNECOLOGICAL SURGERY AS DESCRIBE BY AL- ZAHRAWI IN AL-TASREEF

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Article Received on 20/01/2021

Article Revised on 12/02/2021

Article Accepted on 04/03/2021

ABSTRACT

Surgery is the branch of medical science where the surgeon uses hand and the surgical instruments to cure the ailments. The records of the knowledge of this science are available in various civilization including in india. In the older days this method of treatment was consider an art but during 7th & 8th centuries this art achieved the status of a well-developed science probably due to the best efforts by the Arabs prominently by Muslim surgeon *ABU-AL-QASIM AL-ZAHRAWI (936-1013)*. In Unani system of medicine, science very ancient times surgery has always been a part of treatment. In facts Unani physician were pioneer and exports in surgery and had developed their own instrument and techniques. They practical surgery and wrote many remarkable books on the subject like *KITAB-AL-TASREEF* by *AL-ZAHRAWI*, *KITAB-AL-UMDA FIL-JAHARAT* by *IBN -AL-QUF MASIHI*, *KAMIL-AL-SANAA* by *ALI-IBN-ABBAS-AL-MAJUSI* etc. Among these books. The 30th volume of *AL-TASREEF* which is dedicated to only surgery related topics, gained much popularity among the western surgeons due to its illustrious descriptions of surgical procedures with the help of self-designed instruments. In this famous volume besides other topics, *ZAHRAWI* also described several procedures which are related to gynecology and obstetrics, such as cesarean section, craniotomy and extra uterine pregnancies. *AL-ZAHRAWI* was one of the first scholars in Islamic world to promote nursing and encouraged women to become midwives. He described lithotomy position for vaginal operations. He instructed and trained midwives and wrote a section on midwifery and elaborately described the diagnosis and treatment of women's problem and diseases. In this paper we have tried to elaborate the works and innovations of *AL-ZAHRAWI* in the field of gynecological surgeries. The details about this topic will be discussed in full length paper.

KEYWORDS: AL- Zahrawi, AL-Tasreef, Lithotomy, Gynecology.

INTRODUCTION

The way ancestors have promoted and propagated medical sciences. In-general is something that's on record in the glorious pages of history. In the contemporary world the western intelligent acknowledge their extra ordinary contributions to science and the medical sciences in particular with open heart and open mind. In particular there's speculations, innovations scientific understandings of the things is still seen with.^[1] There is known denying the fact that Unani medicine has contributed to different fields of medicine and surgery has been one of the brine subjects in the history of Unani medicine.^[2] If it is said that the modern surgery and many surgical practices of their roots to the Unani medicines, it would not be an exaggeration of the Arab's physicians only contribute different. Fields of knowledge but also to the art of surgery to next level. Not only did to explain the surgical procedures but also perform them

in the practice among Unani surgeons to contributed a lots to the field of surgery Zahrawi stands if the popularity.^[3] He was not only the brilliant surgeon but founder of many surgical procedures. In his famous book clearance of the medical science for those to cannot compile it comprehensively describes surgical diseases and surgical procedures the retails including is own experiences.^[4] It is evident from his book that how encyclopedic his knowledge of surgery was historians have confirmed in that this book was taught in European medical colleges for around 600 years and it laid the foundations of modern surgery *ABUL-QASIM ZAHRAWI* who has been basically called by many names in Europe was born in city named Zahra which is the Cordoba (spain).^[5] Famous medical historian *IBN-ABE- ASIBA* has named him *KHALF- IBN-ABBAS ZAHRAWI* and has called him an expert in surgery and an authority on knowledge of single and compound

drugs.^[6] His ancestors had migrated from madina his early education began in cordoba. Historian are not sure about his date of death but it is said that he died at the age of 77 years in 1013 CE. He was royal physician to king ABDUL REHMAN 3rd and was designated chief surgeon at cordoba royal hospital. Dar land writes in his dictionary about Zahrawi like this he was the most famous Arab's surgeon and writer who did his clinical practice in cordoba and died in 1110 C.E. He has written a valuable book on medicine and surgery which is based on 30 chapters and is named as "The method of medicine"^[7]

French historian Gustav Laban writes in his book about Arab civilization" The best surgeon among Arabs was Zahrawi of cordoba". Famous historian Donald Campbel writes about Zahrawi's book that "This book was considered an authority on surgery for many centuries in Europe". The way Zahrawi has discussed about surgeries of eye, ear, nose, throat, teeth bones and joints in his book KITAB-AL-TASREEF in a similar way he has discussed gynecology and obstetrics produced in detail, not only old he performs gynecological operations but he has incorporated the surgical instruments used in these produces as defined in pictures. These instruments are used to that day with little modification.^[8]

There is no denying the fact that gynecology and obstetrics has allot to do with surgery that why Zahrawi has written detail account on the surgical producer involved during different stage of pregnancy in general and during the stages of labour in particular it worth here to mention that he has also discussed surgical instrument used during delivery of fetus, expulsion of placenta and different procedures in gynecology with their management.^[9]

Like there have been different language of the AL-TASREEF in the same way chapters related gynecology and obstetrics has been separately translated. Gasper Wolf has published it from basal in 1566 under the name "de gyanciiis". In the same way it second edition has also been published under the following headings.^[10]

He has written a detailed account on Zahrawi practices in gynecology & obstetrics like general surgery has some amazing practice in gynecology and obstetrics too his name we will discuss some of the point that Zahrawi has specifically highlighted.^[11]

Gynecological surgery

1. Modern discourse: Unani physician had not any significant contribution in field of gynecology and obstetrics until Zahrawi not only defined different approaches in gynecology but expounded the science of gynecology and obstetrics. In-modern way, it can be said that no other surgeon has discussed the surgical procedure pertaining to adult women with this comprehension.^[12]

- 2. Use of cotton in vaginal packing:** Zahrawi used cotton in vaginal packing involving the fracture of pelvis bone for the first time.
- 3. Use of cautery in ill temperament of uterus:** He used the cautery to treat the ill temperament of uterus.
- 4. Use of vaginal lithotomy:** He was the first to use vaginal lithotomy in expansion of bladder stones through this process.^[12]
- 5. Mammotomy in CA breast:** He advised complete mammotomy in carcinoma of breast. He also advised mammoplasty in case of gynecomastia in men.^[11]
- 6. No treatment in case of uterine carcinoma:** Zahrawi also expressed his reservations in the treatment of carcinoma of uterus sitting it is mostly unsuccessful.^[11]
- 7. Description of patients positions in gynecological procedures:** The different position regarding different gynecological procedures were comprehensively described by Zahrawi the positions like *Lithotomy's position*, *Simon's position* and *Walcher's position* are described to him.^[12]
- 8. Description of foetal positions in uterus:** He described different foetal positions and also give directions for correcting the wrong positions.^[11]
- 9. The types of placenta and its expulsion procedures:** He described different expulsion patterns of placenta which particularly included manual removal of placenta. He also gives the blue print of the instruments used therein. He also gave detailed accounts of placenta previa placenta accereta and their complications.^[11]
- 10. Explain of dead fetus:** He used cranio exercise technique in the expulsion of dead fetus.^[10]
- 11. Treatment procedure of hydrocephalous:** he also describes the hydrocephalous of fetus and suggested rupture of membrane and cerebral compression as its treatment.^[9,10,11]
- 12. The vaginal and cervical cyst:** He also described different type blister and cervix condylomata acuminata and sebaceous cyst are vary closed to his description.^[11]
- 13. Imperforation of hymen and different incision:** He described cruciate insicions for the same.^[11]
- 14. Caudate disease:** He described the disease in cervix comes out as long cylindrical body which is compare to tail that reason for it being called the caudate disease.^[9,10]
- 15. Diagrme of surgical instrument:** Zahrawi also draw diagrams of different surgical instrument used in gynecology and obstetrics. No Unani or Arab's surgeon had previously done it. Although some historians Ibn-Sina to have used surgical instruments during delivery but his book is devoid of any such diagram. Zaharwi gave diagrams of following instruments in his book.^[12]
 - a) Vaginal speculum.^[11]
 - b) Cephalo-tribes.^[11]
 - c) Midwifery book.

- d) Forceps.
- e) Causer.
- f) Scissors.
- g) Funnel.
- h) Syringing.^[12]

16. Comprehensive & clear description and personal experimentation in Jarahat: Zahrawi which includes different gynecological producers which is one of a kind comprehensively describes gynecological producers & his personal equipment in a very lucid manner.^[12]

17. Others: Zahrawi had immensely benefited from the books of Paulus of degenia. In addition, He has benefited from the works of Celsius, Soranus, Galen & Rhazes.

Zahrawi has divided the surgical portion of his book AL-TASREEF into three chapters in which the 2nd chapter comprises of 98 difficult topics. Froms 80th topics, the discussion goes around different aspects of gynecology & obstetrics. This chapters are follow.^[12]

(1) Chapter -1

Topic- 39→ On cauterization of uterus.

Topic 70→ On treatment of hemorrhoids.

Topic71→ On cutting the clitoris and fleshy growth in female pudenda.

Topic72→ On treatment of imperforated female pudenda.

Topic73→ On treatment of hemorrhoids and warts and red poshing arising in female pudenda.

Topic 74→ On the perforation eruption occurring in uterus.

Topic 75→ On the training of midwives in how to treat living foetuses when not brought forth in natural manner.

Topic 76→ On the extraction of the dead foetus.

Topic 77→ On the forms of instruments necessary for extraction the foetus.

Topic 78→ On the extracting the after birth. Apart from this there are some special topic like 48 on gynecomastia 53 on cancer 68 on removal of stone in female.

Topic 18→ On treatment of fracture of pelvic bone and vagina structure.

Diseases mention in all above topics are also classified according to the anatomy of genital organ.^[12]

Disease of uterus and cervix

1. ILL temperament of the uterus.^[12]
2. Cancer of uterus.^[12]
3. Stony tumors of uterus.^[12]
4. Corrosive ulcer of the uterus.
5. Uterine ulcer.^[12]
6. Uterine abscess or pyometra.^[12]
7. Metritis.^[12]
8. Uterine fistula.^[11]
9. Uterine warts.^[12]
10. Rupture or laceration of the uterus.^[12]
11. Polyp of uterus.^[12]
12. Caudate disease.^[12]

Disease of Vulva and Vagina

1. Cervical warts.
2. Polypus vulva.
3. Pustules of vulva.
4. Atresia.
5. Clitromegaly.
6. Hemaphroiditism in female.^[12]

Disease of breast

1. Masto carcinoma
2. Gynecomastia.^[11,12]

Other diseases

1. Extraction of stone from the female.
2. Fracture of vagina and pelvic bone.^[8]

Midwifery

1. Duties and characteristics of midwife.
2. Formal and abnormal presentation of foetus.
3. Extraction of the foetus and instruments.
4. Extraction of dead foetus.
5. Hydrocephalous.
6. Twin pregnancy.
7. Abortion.^[7,8]

❖ Zahrawi had mentioned clitormegaly as endocrinal disease occur due to excessive used of steroid and to treat condition by cutting and holding by hook.^[12]

❖ Zahrawi had mentioned the treatment of the cervical fibroid, cervical polyp pedicle cutting surgery.^[11,12]

❖ Zahrawi had mentioned the two type of vaginal atresia i.e acute and chronic. He also declared about the 3rd degree prolapse with the name of procedentia.^[12]

❖ Zahrawi had mentioned the hematocolpos as the in term of amenorrhea.^[7,8]

❖ Zahrawi had mentioned treatment of the carcinoma of breast. He also advised to remove cancerous tissue from breast and extra tissue in case of gynecomastia by mammoplasty. Zahrawi mention about the cancer of uterus, but he advised to aviod the surgical procedure in case of cancer of uterus.^[8]

❖ Zahrawi had also described about the cranioplasty, manual removal of placenta, placenta previa, placenta accereta from the beginning of the of surgery.^[11,12]

❖ Zahrawi mention hydrocephalous, rupture of membrane and cerebral decompression.

❖ Zahrawi had defined about uterine polyp by the name of *Bawaseer-e-Rahem*.^[15]

❖ Zahrawi had mentioned the two type of metritis i.e acute, chronic. He also advised the medicine for vaginal douching and vaginal tampon.^[14,15]

❖ Zahrawi had mentioned about the cervical erosion and its management.^[11,12]

❖ Zahrawi had mentioned the presentation like breach, vertex and shoulder presentation.^[12]

❖ He also mentioned the twin pregnancy.^[12]

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