Incidence and causes of emergency cesarean sections in Diwaniyah city

الخلاصة

من خلال هذه الدراسة لاحظنا ان اكثر من 30 % من حالات الولادة الطارئة في مدينة الديوانية قد تمت بعمليات قيصرية ، أجريت هذه الدراسة على السيدات الحوامل اللواتي ادخلن الى مستشفى الديوانية التعليمي للنسائية والأطفال في حالة ولادة طارئة المفترة من كانون الثاني 2013 الى كانون الثاني 2014 ، ان نسب العمليات القيصرية مرتفعة في مدينة الديوانية وهي في ارتفاع في مدن العراق عامة ، كما ان العمليات القيصرية هي في ارتفاع في بقية دول العالم سواء الدول الصناعية او الدول النامية ، هذه النسب تدق ناقوس الخطر لدى منظمة الصحة العالمية التي تعتبر من خلال ضوابطها ان نسب العمليات القيصرية يجب ان لا تزيد عن 15 % ، بينما تجاوزت النسب في معظم دول العالم هذه النسبة بكثير حيث سجلت بعض الولايات والمدن الامريكية نسبة عمليات قيصرية وصلت الى 40 % الامر الذي اثار انتباه الكثير من الباحثين وحاولوا وضع حلول و مقترحات لتخفيض نفذه النسب ..

كلمات مفتاحية: و لادة طبيعية، عملية قيصرية، مدينة الديوانية.

abstract:

In Diwanyah city more than 30 % of women admitted for labor in Diwanyah maternity teaching hospital between January 2013 and January 2014 delivered by cesarean section, the rate of cesarean section is high in Diwanyah city & is increasing in other cities of Iraq, it is also increasing all over the world including the developing & developed countries.

-Key words:

Cesarean section C-S, Labor, Diwanyah

Introduction:

Numerous references to C-S appeared in ancient hindu, Egyptian, Grecian, roman, chinese& European folklore. Ancient chinese etchings depict the procedure on living women . 1

Yet the origin of cesarean has apparently been distorted over the time, It is commonly believed to be derived from the surgical birth of Julius Ceasar, but this seems unlikely since his mother Aurelia is reputed to have lived to hear of her son"s invasion to Britain, since the procedure at that time was performed on dead or dying mother as an attempt to save the child, so the roman law under Ceasar decreed that all women who were dead or dying at childbirth must be cut open, hence called Ceasarean. 2

Until the sixteenth & seventeenth centuries the procedure was called cesarean operation, this began to change following the publication in 1598 Jacques Guillimeau"s book on midwifery in which he introduced the term section, increasingly thereafter section replaced operation.3

Cesarean section has different meaning to different people at different times, the initial purpose was to retrieve the infant from dead or dying mother, either to save its life or for religious edicts, so that the infant might be buried separately from his mother, so the operation was not intended to preserve the mother slife, but in the nineteenth century this purpose was in the grasp of medical professionals.4

The first written record of a woman & baby surviving cesarean section comes from Switzerland in 1500, Many of the earliest successful cesarean sections took place in remote rural areas lacking in medical staff & facilities .5

In the eighteenth & early nineteenth centuries anatomists & surgeons extended their knowledge of human anatomy, by later 1800s greater access to human cadavers permitted medical students to learn anatomy through personal dissection, The first recorded successful cesarean in the British Empire was

conducted by a woman sometime between 1815 and 1821, called James Miranda Stuart Barry. 6 In 1879 one british traveller ,R.W.Felkin , witnessed successful cesarean performed by Ugandans in Uganda.7

Queen Victoria, the head of the church of England, had chloroform administered for the births of two of her children (Leopold in 1853 and Beatrice in 1857) as anaesthesia for cesarean section.8

With the availability of anaesthesia, old methods to deliver entrapped baby were replaced with cesarean section, these methods included craniotomy & use of forceps, but most women died at that time due to infection, peritonitis & septicemia, according to one estimate in Paris most women died after cesarean section between 1787 and 1876 .9

Once anaesthesia, antisepsis, asepsis were available; obstetricians were able to improve their procedure specially after using silver sutures invented by premiere American gynecologist J.Marion Sims who used it to treat vaginal tears resulted from childbirth. 10

As cesarean section became safer , obstetricians such as Robert Harris in the united states, Thomas Radford in England , Franz Von Winckel in Germany encouraged early cesarean section to improve the outcome of labour, this new approach assisted in reducing maternal & perinatal mortality at that time . 11

Thereafter surgeons turned their attention to where to incise the uterus, between 1880 and 1925, obstetricians experimented with transverse incision in the lower segment of the uterus, this refinement reduced the risk of infection and of subsequent uterine rupture in

next pregnancy, then there was the Delee incision by Joseph B. Delee& Alfred C. Beck in the United states . 12

The discovery of penicillin by Alexander Fleming in 1928 had dramatically reduced maternal mortality after cesarean section .13

By 1938 half of united states births took place in hospitals, by 1955 this had risen to 99 %, advances in anesthesia including spinal & epidural anesthesia had contributed to improving the safety & experience of cesarean section, permitting women to remain conscious during surgery, it resulted better outcome for mothers & babies, and facilitates immediate maternal baby contact. 14

-methods:

This study was performed on ladies attending Diwanyah maternity hospital for labour between January 2013 till January 2014, only ladies in labour were included, cold cases like ellective 3rd cesarean section were excluded from the study, this is to direct a light on the rate of cesarean sections & the indications for these sections in Diwanyah city...

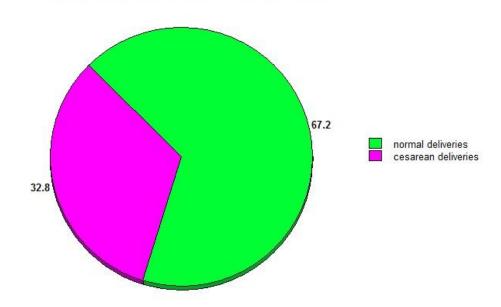
-Results:

Total number of deliveries were 6140, 4120 (67.2%) were by vaginal route while 2020 (32.8%) were by cesarean section...

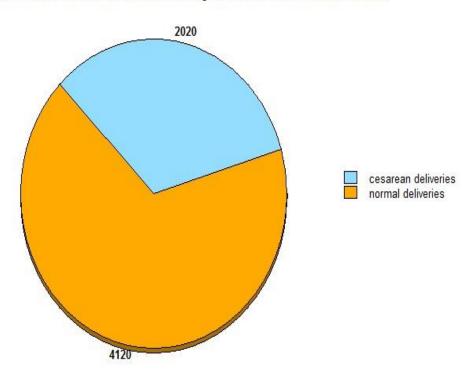
Indications for these sections were malposition & malpresentation (mainly breech) 185 (9.1%) , antepartum hemorrhage 145 (7.17%) , fetal distress 190(9.4%) , no progress in labour 170(8.4%) , previous one cesarean section 962(47.6%) , maternal hypertension 48(2.37%) , maternal diabetes 25(1.23%) ,bad obstetric history 150(7.4%), others 145 (like failure of induction..)((7.1%)

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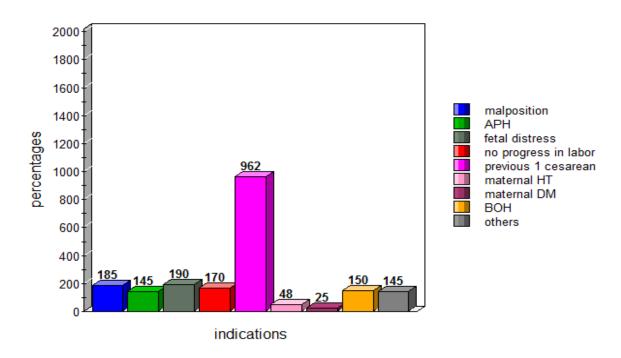
rate of cesarean section in Diwaniyah City



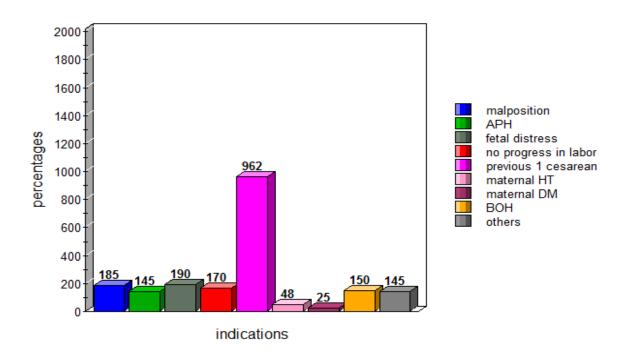
number of cesarean deliveries compared with normal deliverie



indications of cesarean section



indications of cesarean section



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Conclusion:

There is a high rate of cesarean sections performed in Diwanyah City which exceeds 30 %, while the WHO recommends cesarean delivery rate of 10-15 %,

Any figure more than this is alarming and requires investigating the reasons for such high rates because the outcome for mothers & newborns are not better (if not worse)in cesarean deliveries than in normal vaginal deliveries ...

-Discussion:

Cesarean section rate in Diwanyah between January 2013 and January 2014 is 32.8 %, which might not reflect the cesarean section rate in other cities of Iraq,

But comparing this rate with a rate of 31 % in Najaf al ashraf city according to figures collected by ass.proff. Amal Mubarak in Kufa college of medicine, the rate is close to that in Diwanyah...

I believe that the reasons behind these high figures in Diwanyah City are:

1.absence of pre-pregnancy care clinics which may detect a lot of problems earlier & solve some of them if possible.

2.lack of antenatal care for many ladies specialy in rural areas which are seen for the first time in labor room may be with pregnancy complications like high blood pressure or obstructed labor or abnormal presentation or lie

- 3.fears of malpractice lawsuits if the baby or mother develop complications during a normal delivery which takes longer time than cesar .
- 4. the desire of some doctors & even mothers to schedule the deliveries at precise timing.
- 5. higher payments for obstericians for cesarean deliveries compared with normal vaginal deliveries despite the longer time spent by obstetricians with the mothers in case of vaginal deliveries.

Comparing these figures with other studies like one In Ethiopia in which the overall institutional rate was 18 % in 2012. 15

Other studies have shown that countries with low resources have a low rate of cesarean section , as it is 4.5 % in Congo , 1 % in Kenya , Uganda and Rwanda ..16

There is no standard classification system for cesarean section indications especialy in developing countries .17,18 ..

Many cesarean sections are performed under inappropriate or unclear indications ..19

In India a study performed by Kounteya Sinha in 2012 have stated that 9 % of all births in India were by cesarean section while it was about 5 % in 2005 ...

In comparison the cesarean section rate was 7% in Pakistan at 2012, in Nepal it was 3% and in Afganistan it was 5% in the same year . 20.

In USA there is a variation in cesarean section rate between different states, according to consumer reports organization in a subject published at May 2014: Elliot Main MD: the director of California Maternal quality care, reviewed their data, the ratings revealed that cesarean rate vary dramaticaly between states e.g. almost 55 % of pregnant women anticipating low risk deliveries (women who haven"t had cesarean section before, don"t deliver prematurely, pregnant with a single baby who is properly positioned) nontheless undergo cesarean section at Los Angeles Community Hospital, while at Sierra Medical Center:Elpaso ,Texas 37 % of low risk women delivered by cesarean section, he (Dr.Elliot) commented in his report that the procedure of cesarean section drive up the costs and increases the risks both of mothers and babies, he adds: its time those hidden numbers are brought to light . 21.

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