



شبكة المعلومات الجامعية
التوثيق الإلكتروني والميكروفيلم

بسم الله الرحمن الرحيم



MONA MAGHRABY



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شبكة المعلومات الجامعية التوثيق الإلكتروني والميكروفيلم



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جامعة عين شمس

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قسم

نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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يجب أن

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**External Negative Pressure Dressing
System (ENPDS) vs. Traditional
Wound Dressing for Cesarean Section
Incision in Obese Women
(A Randomized Controlled Trial)**

Thesis

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Introduction

Heftiness, characterized as weight list (BMI, determined as weight (kg)/[height (m)]²) of 30 kg/m² or more prominent, is a typical clinical comorbidity of pregnancy influencing 33% of regenerative matured ladies. Maternal stoutness is likewise an all around perceived danger factor useless work cesarean conveyance a cesarean segment pace of 33% in fat ladies BMI of 30 or more noteworthy 43% in ladies BMIs of 40 or more prominent (Smid et al., 2017).

Corpulence is a free danger factor post-usable careful site wound complexities. danger of post-cesarean careful site wound inconveniences has been shown twofold every 5 unit increment in weight file (BMI) over 30 kg/m, happening in about 10% of fat ladies going through cesarean segment notwithstanding prophylactic procedures (e.g., anti-toxins) (Mark et al., 2014).

Wound mending is a succession of physiologic occasions that incorporate aggravation, epithelialization, fibroplasia, development. Disappointment of twisted mending at careful site can lead seroma, hematoma, wound dehiscence, incisional hernia careful site contamination (Pai et al., 2019).

Careful injury dehiscence (SWD) is characterized as fractional or tal detachment of recently approximated twisted edges, due a disappointment of appropriate injury mending up including 30 days posperatively (Sy-Hodgetts et al., 2018).

Twisted dehiscence concurring Centers Disease Control Prevention definition groups dehiscence as careful site contamination paying little mind to wher dehiscence is affirmed as microbial or of a non-microbial nature (Gommesen et al., 2019).

It is partitioned in Superficial dehiscence including skin twisted alone, rectus sheath staying flawless Full thickness dehiscence where rectus sheath fizzles mend blasts, distension of stomach content "burst mid-region" (Clark, 2016).

Wound difficulty, regardless of whether not joined by a disease, is a huge reason for posperative horribleness following cesarean conveyance. Moreover expanded expense of care, re is bother of rapy, expanded posperative

agony recovery, just as trouble exercises of day by day living (Orth et al., 2016).

It is coherent utilize novel danger lessening approaches including negative pressing factor twisted rapy at season of a medical procedure that may forestall wound entanglements guarantee that re is a self evident advantage ir utilize wound complexity prophylaxis (Wells et al., 2019).

Negative pressing factor wound rapy (NPWT), otherwise called a vacuum helped conclusion (VAC), includes controlled use of sub-barometrical pressing factor neighborhood wound climate, utilizing a fixed injury dressing associated a vacuum advance mending by essential expectation by diminishing danger of hemama/seroma due improved lymphatic waste lessens danger of twisted dehiscence by diminishing parallel shear weight on stitches diminishing bacterial burden twisted liquids by expanding blood stream, oxygenation, angiogenesis, epilialization (Scalise et al., 2015).

Late NICE clinical advances direction upholds case embracing negative pressing factor wound dressings shut

careful cuts. y are related less careful site diseases, seromas wound dehiscence looked at stard wound dressings (Skervin et al., 2020).

On opposite, RCOG audit of clinical viability rules showed no pertinent proof in regards to clinical adequacy of negative pressing factor wound dressings versus distinctive careful dressing types distinguished (Gary et al., 2019).

A huge decrease in injury dehiscence on premise of pooled information from 16 investigations showed an advantage of NPWT framework looked at stard care in shut careful cuts exhibited by a meta-examination by Strugala in 2017 (Strugala et al., 2017).

2020 Cochrane audit of negative pressing factor wound rapy careful injuries mending by essential conclusion discovered fourteen examinations which covered dehiscence, proof proposed no reasonable distinction between NPWT stard dressing (Norman et al., 2020).

Thus, it judicious that we furr study adequacy of Negative pressing factor twisted rapy on shut careful injuries.



Aim of the Work

point of this examination is decide wher negative pressing factor wound rapy decreases danger of post-cesarean injury inconveniences among corpulent ladies looked at stard careful injury care.

Chapter (1):

Wound Healing

Phases of wound mending:

Hemostasis:

At season of careful entry point, vascular injury happens on a full scale vascular miniature vascular scale. Harmed blood vessel vessels quickly choke through constriction of smooth muscle in roundabout layer of vessel divider, intervened by expanding cyplasmic calcium levels. Vessels up a breadth of 5 mm can be totally shut through constriction, albeit this can possibly happen if injury is in a cross over plane (Netam et al., 2019).

in almost no time, diminished blood stream intervened by arteriole narrowing leads tissue hypoxia acidosis. This advances creation of nitric oxide, adenosine or vasoactive metabolites cause a reflex vasodilatation unwinding of blood vessel vessels. All the while, histamine discharge from pole cells likewise acts increment vasodilatation increment vascular penetrability, encouraging passage of inflammatory cells in extracellular

space around wound. This clarifies trademark warm, red, swollen appearance of early injuries (Singh et al., 2017).

Furr blood misfortune at this stage is additionally forestalled through mation of a coagulation which is accomplished through three key instruments:

1. Intrinsic pathway of thickening course (contact actuation pathway):

Endolial harm because of tissue injury uncovered sub-endolial tissues blood which brings about actuation of facr XII (Hageman facr). This starts proteolytic cleavage course which brings about actuation of facr X which changes over prothrombin thrombin bringing about transformation of fibrinogen fibrin mation of a fibrin plug.

2. Extrinsic pathway of coagulating course (tissue facr pathway):

Endolial harm brings about openness of tissue facr (which is available in many cells) coursing blood. This outcomes in enactment of facr VII rest of outward pathway

of coagulating course which at last outcomes in thrombin initiation.

3. Platelet enactment:

Following initiation by thrombin, thromboxane or ADP, platelets go through an adjustment in morphology emit substance of its alpha thick granules. Activated platelets follow bunch at destinations of uncovered collagen in a platelet plug incidentally capture dying. This attachment is strengthened by fibrin von Willebrand factor just as actin myosin fibers in platelets. Platelets likewise produce different development factors cytokines which proceed manage recuperating course. More than 300 flagging particles have been disconnected from activated platelets, which impact regulate capacity of or platelets, leukocytes endothelial cells, for example,

- TGF- α from Macrophages Platelets helps formation of granulation tissue Stimulates multiplication of epithelial cell fibroblasts.

- TGF- β from Platelets, Neutrophils, Macrophages Fibroblasts helps in Chemotaxis, Trans-

separation of fibroblasts myofibroblasts, Collagen network development, Stimulates angiogenesis Wound constriction.

- PDGF from Platelets, Fibroblasts, Endothelial cells Macrophages helps in Chemotaxis, Fibroblast multiplication Collagen synthesis.

- VEGF from Platelets, Neutrophils Keratinocytes, Stimulates angiogenesis Neovascularization.

- Serotonin from Platelets helps in Vasoconstriction, Platelet aggregation, Chemotaxis Increases vascular permeability.

- TNF- α from Platelets helps in Chemotaxis, Nitric oxide release Activation of or development factors.

- PGE₂ from Keratinocytes, Macrophages Endothelial cells helps in Vasodilation, Platelet disaggregation, Increases vascular permeability, Pain, Fever.