

มหาวิทยาลัยราชภัฏนครปฐม  
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# Unit VIII

## Basic Surgical Care

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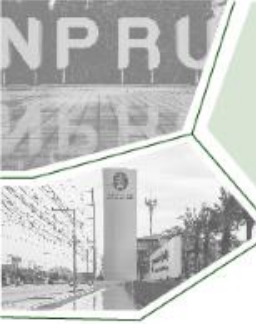
# LEARNING OBJECTIVES OF THE TOPIC



After studying this topic, the students will be able to ....

- ☐ Identify the different types of wounds and basic surgical wounds care procedures.
- ☐ Determine the appropriate basic surgical practice for nurses.





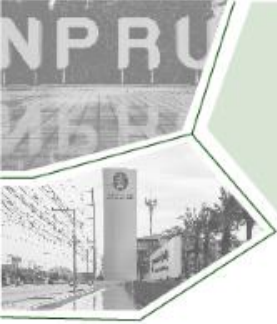
# SCOPE OF THE TOPIC

**WOUND TYPES**



**BASIC SURGICAL PRACTICE**

1. Simple suture
2. Nail extraction
3. Incision and drainage (I&D)
4. Medical management

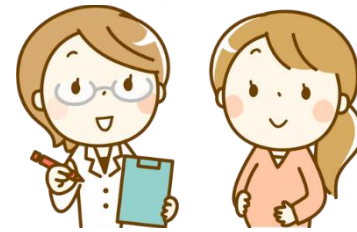


# WOUND TYPES

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**Wound** – a break of normal continuity of the skin, tissues or muscles caused by physical, chemical or biological insults.

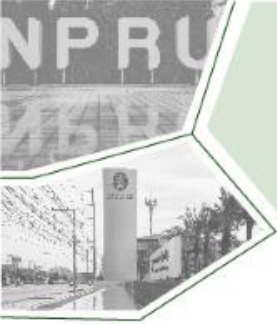


## Two (2) types of wounds:

(1) **Open wound** – means the whole thickness of skin is opened (i.e., laceration and skin loss).

(2) **Closed wound** – means the skin is intact or not opened (i.e., crushing injury and contusions).





# TERMINOLOGIES USED

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**Dehiscence** – it happens when there is partial or complete separation of outer wound layers.

**Evisceration** – it happens when the wound ruptures

**Eschar** – it happens when a wound becomes dry, leathery dead tissue.

**Granulation tissue** – it happens when new tissues grow and fill the wound.

**Sinus tract** – it happens when tunnel develops between infected cavity and the skin's surface.



Extracted from: Fundamentals of Nursing Care concepts, connections and skills (2015)

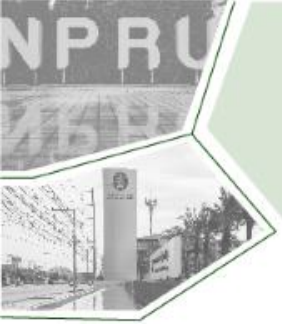


# WHAT TO ASSESS IN A WOUND

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1. Amount of blood loss
2. Size and nature of the wound
3. Wound location
4. Causes
5. Time of occurrence
6. History of illnesses, drug allergies and record of vaccines received



# SCOPE OF THE BASIC SURGICAL PRACTICE FOR NURSES

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1. Simple suture
2. Nail extraction
3. Incision and drainage (I&D)
4. Medical management





# SCOPE OF PRACTICE<sup>1</sup>

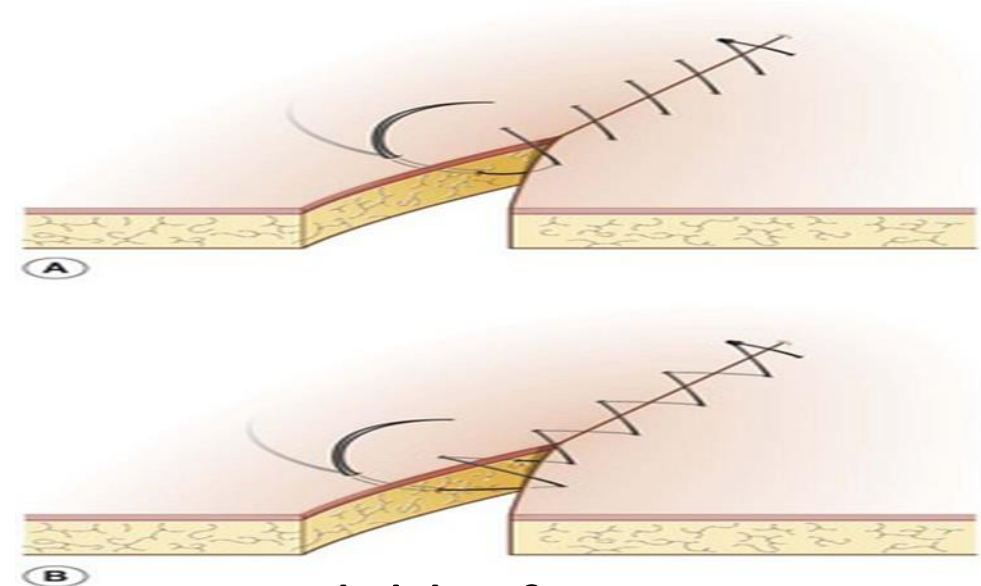
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**1. Simple suture** – is a technique used to close wounds using a suture.

## Types of simple sutures:

1. Simple interrupted suture
2. Running lock stitches
3. Mattress suture



Picture available from

[https://veteriankey.com/wp-content/uploads/2016/07/B9780702047701000101\\_f010-010-9780702047701.jpg](https://veteriankey.com/wp-content/uploads/2016/07/B9780702047701000101_f010-010-9780702047701.jpg)



# SCOPE OF PRACTICE<sup>1</sup>

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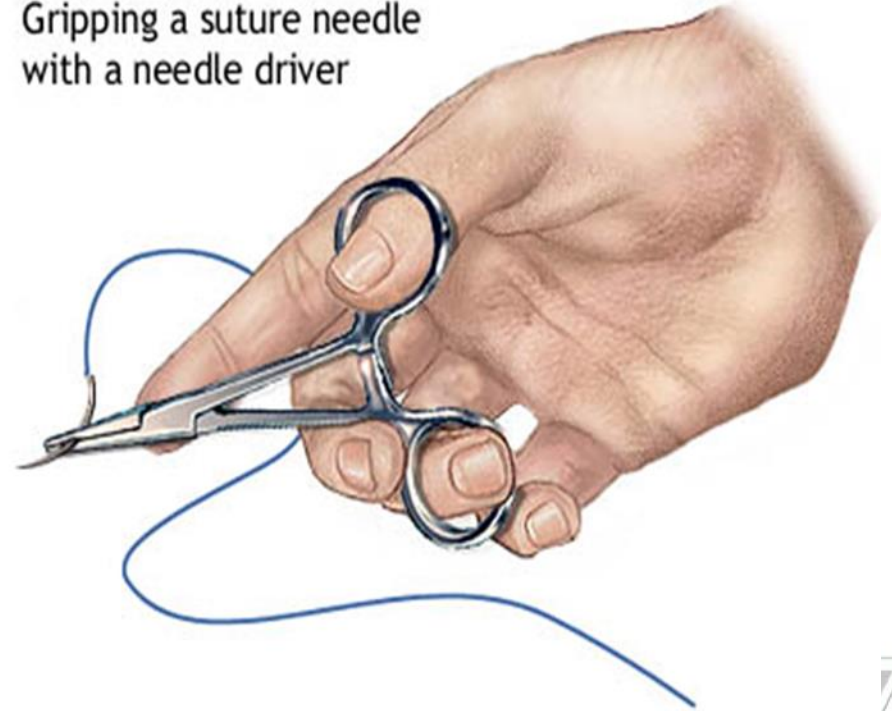
## 1. Simple suture – is used to close wounds using a suture.

<https://www.youtube.com/watch?v=z8oWv-nVO6g>

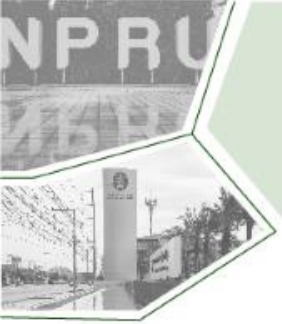


Picture available from  
<https://jamaicahospital.org/newsletter/wpcontent/uploads/2016/04/Sutures.jpg>

Gripping a suture needle  
with a needle driver

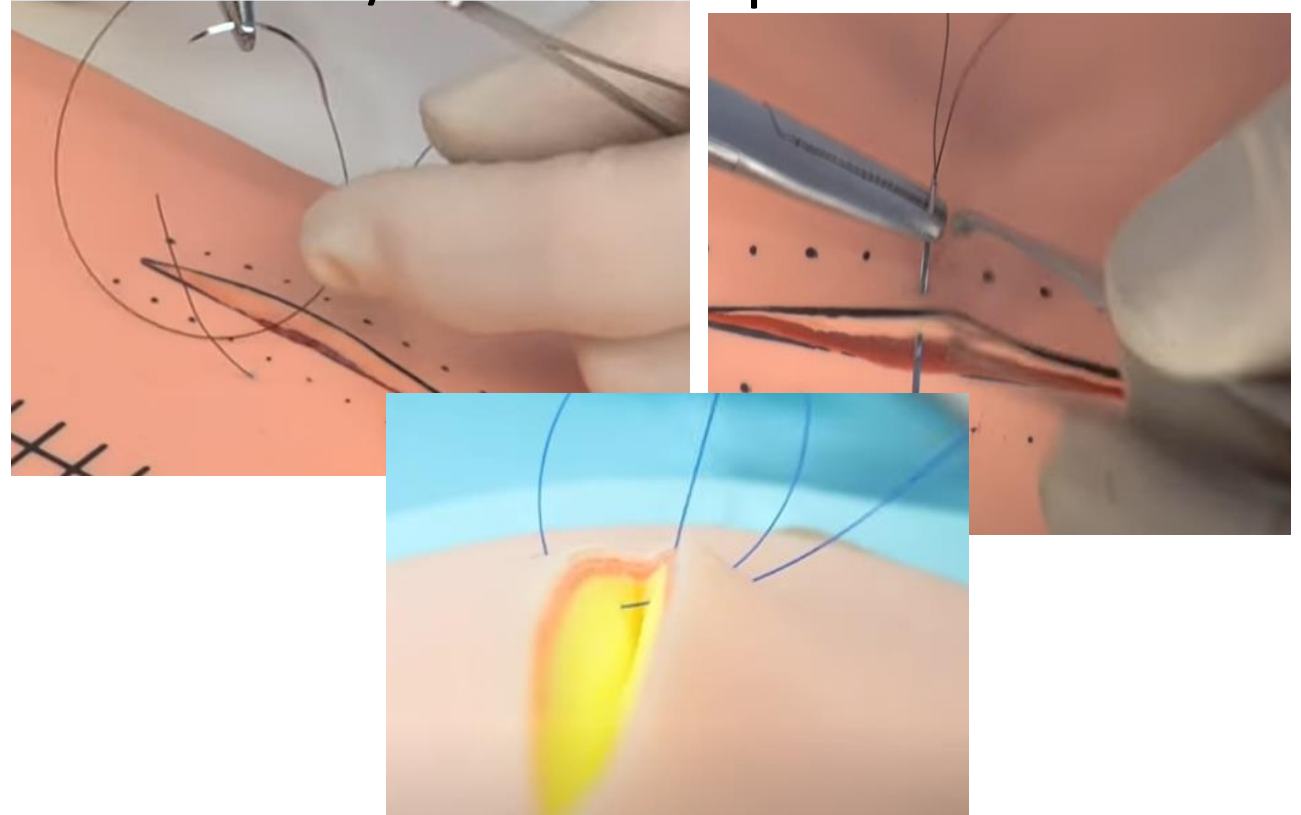


adam.com



### 3. Mattress suture

<https://www.youtube.com/watch?v=6qF4mxB7KzM>



### 2. Running lock stitches



Picture by Wanpen

[https://www.youtube.com/watch?v=\\_7mOYH-cWQI](https://www.youtube.com/watch?v=_7mOYH-cWQI)



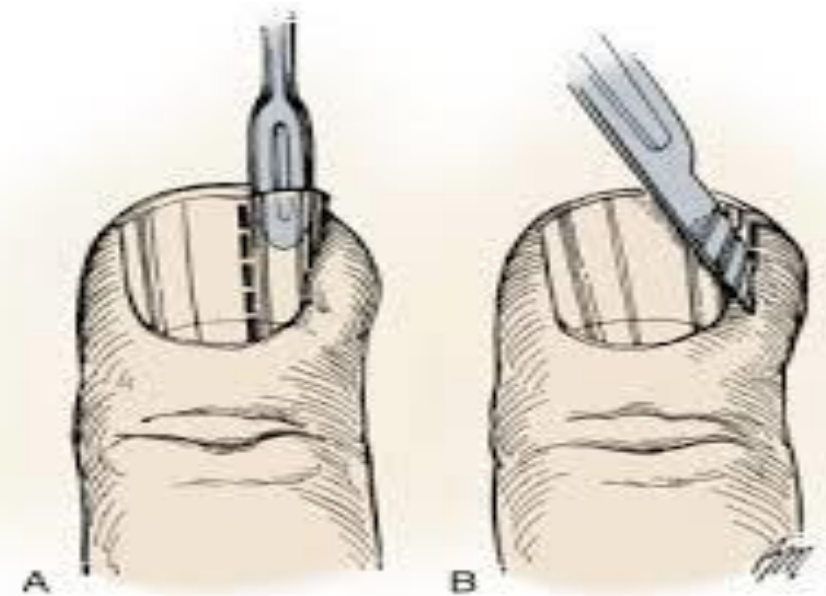
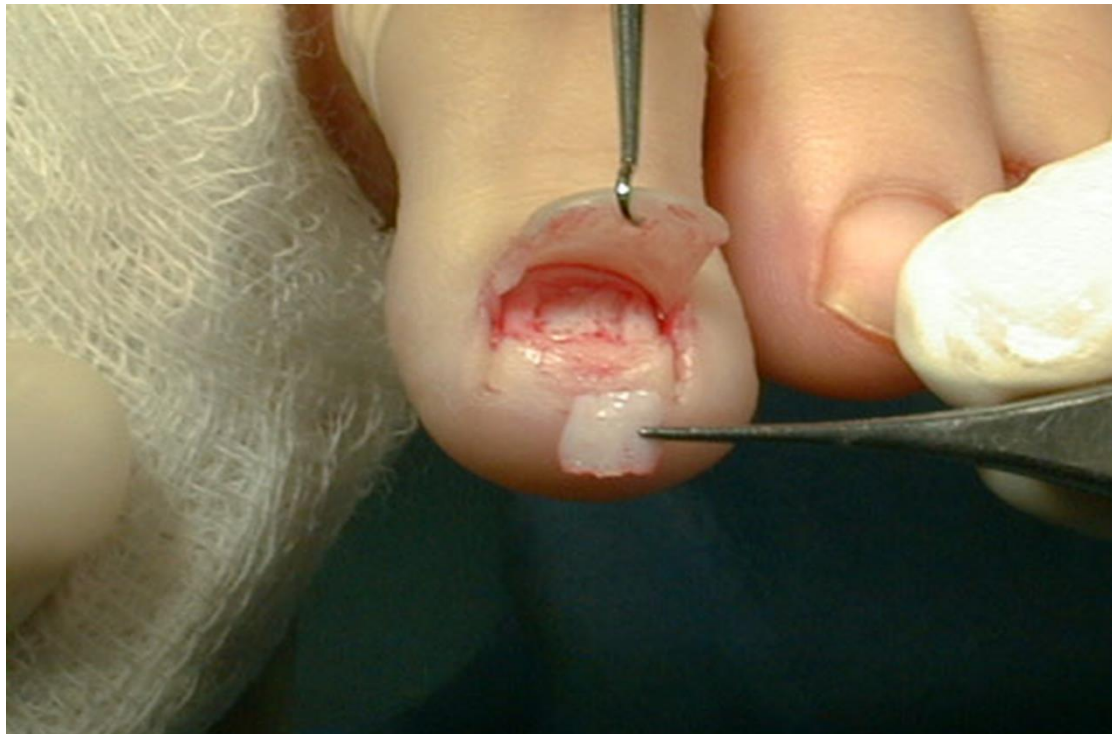
# SCOPE OF PRACTICE<sup>2</sup>

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[https://www.youtube.com/watch?v=-D58\\_mWPtpw](https://www.youtube.com/watch?v=-D58_mWPtpw)

**2. Nail extraction** – a form of treatment that is performed to treat the nail after a traumatic injury or recurrent infections.



Picture available from  
[http://medinfo2.psu.ac.th/surgery/Collective%20review/2560/9.Hand\\_infections%20\(Sarayut%2024.5.60\).pdf](http://medinfo2.psu.ac.th/surgery/Collective%20review/2560/9.Hand_infections%20(Sarayut%2024.5.60).pdf)

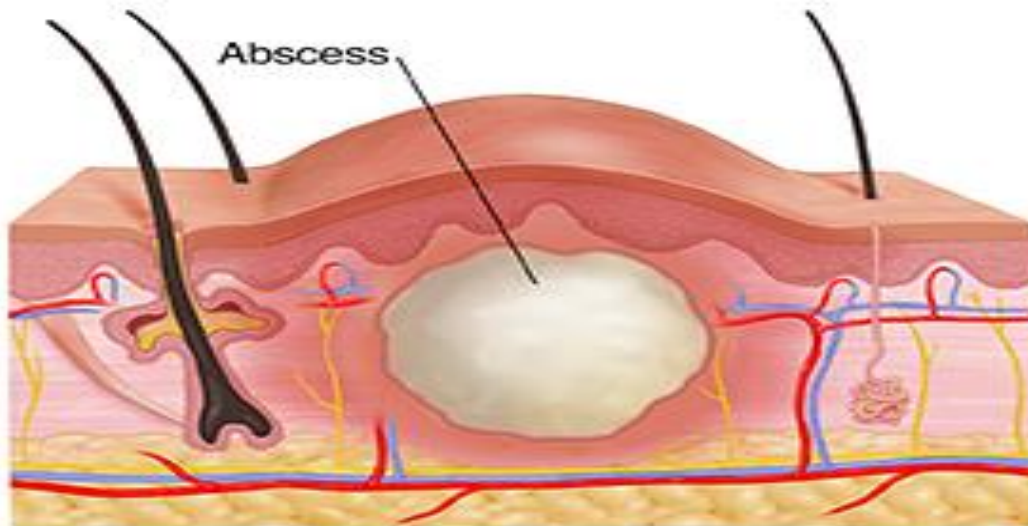


# SCOPE OF PRACTICE<sup>3</sup>

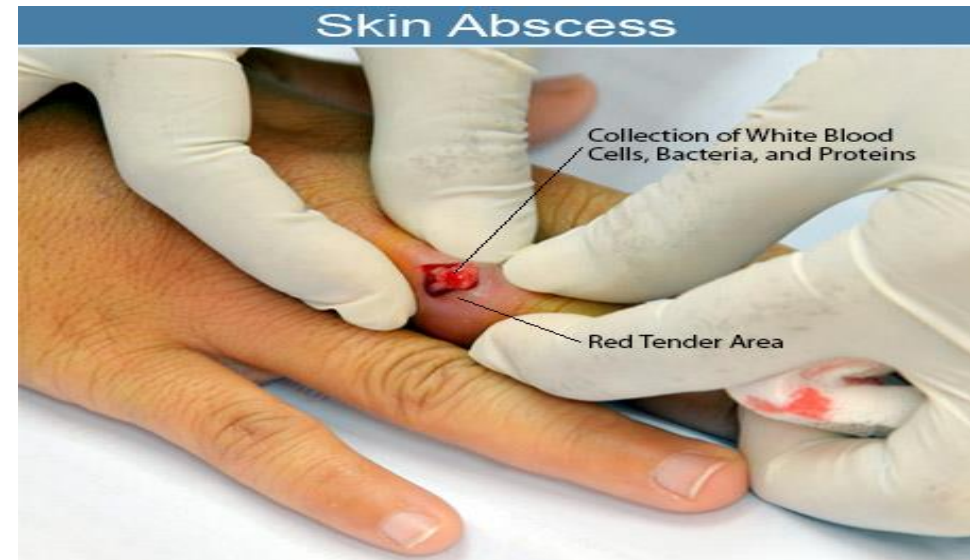
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**3. Incision and drainage (I&D)** – is a procedure performed to release pus or pressure under the skin caused by an abscess, boil, infected paranasal sinus.



Picture available from  
<https://www.saintlukeskc.org/health-library/abscess-drainage>



Picture available from  
<https://images.emedicinehealth.com/images/skin-abscess.jpg>

## SCOPE OF PRACTICE<sup>4</sup>

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**4. Medical management** – is an independent strategy designed for nurse practitioners to provide and improve the quality and outcome of basic surgical care performed in Basic Medical Care settings and these includes:

- (a) Tetanus Toxoid (TT) vaccine;
- (b) Local anesthesia; and
- (c) Administration of antibiotics

# SCOPE OF PRACTICE<sup>4</sup>

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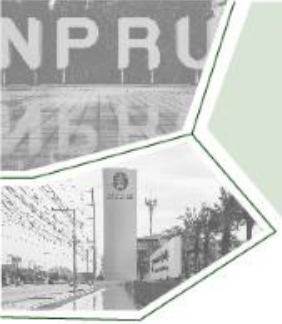
**(a) Tetanus Toxoid (TT) vaccine** – is administered to patients as wound prophylaxis to maintain an adequate levels of tetanus toxin immunity.

Tetanus prophylaxis		
	Clean or minor wound	Dirty or severe wound
≥3 tetanus toxoid doses	<ul style="list-style-type: none"><li>• Tetanus toxoid-containing vaccine* only if last dose was ≥10 years ago</li><li>• <b>No TIG</b></li></ul>	<ul style="list-style-type: none"><li>• Tetanus toxoid-containing vaccine* only if last booster given ≥5 years ago</li><li>• <b>No TIG</b></li></ul>
Unimmunized, uncertain, or <3 tetanus toxoid doses	<ul style="list-style-type: none"><li>• Tetanus toxoid-containing vaccine* only</li><li>• <b>No TIG</b></li></ul>	<ul style="list-style-type: none"><li>• Tetanus toxoid-containing vaccine* <b>PLUS</b></li><li>• <b>TIG</b></li></ul>
* Booster given as tetanus/diphtheria toxoids adsorbed (Td) or tetanus toxoid/reduced diphtheria toxoid/acellular pertussis (Tdap)		

Picture available from <https://o.quizlet.com/9vq-3pF5JzQleN4MnelOjw.png>



Picture available from [https://static-12.sinclirstoryline.com/resources/media/7f9d1abc-2cdb-4622-8ebe-5e87bcafb623-large16x9\\_TetanusShot\\_August.jpg?1557177439899](https://static-12.sinclirstoryline.com/resources/media/7f9d1abc-2cdb-4622-8ebe-5e87bcafb623-large16x9_TetanusShot_August.jpg?1557177439899)



# Immunization side effects:

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## Common:

- Infants and young children: mild fever, grizzly, unsettled, unhappy or sleepy
- Older children & adult: pain, redness and swelling at the injection site

Very rare: anaphylaxis





# SCOPE OF PRACTICE<sup>4</sup>

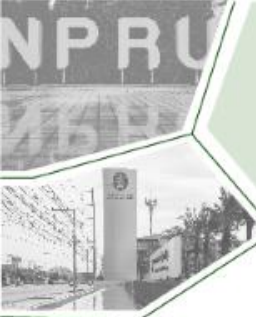
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**(b) Local anesthesia** – is also called “local anesthetic”, an injection of medicine to numb a small area of the body particularly around the wound area prior to a certain minor surgery procedure.



Pictures by Wanpen



# SCOPE OF PRACTICE<sup>4</sup>

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**(c) Administration of oral antibiotics** – a prescribed antibacterial oral drug administered by nurse practitioners as prophylaxis to patients before or after a minor surgical wound procedure.

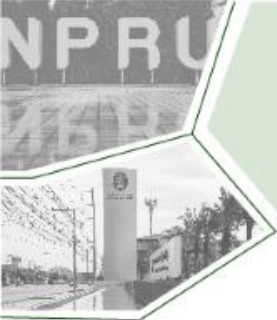


Picture available from

<https://www.indiamart.com/proddetail/erythromycin-18747839955.html>



Picture available from <http://www.hkpharma.co.th/136897-dicloxacin/details.html>



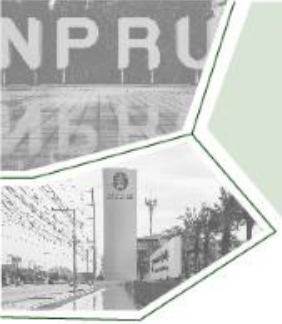
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# Antibiotic prophylaxis in simple wound in Thailand

**By** Pisont Jongtrakul in Rational Drug Use in Primary Care Bangkok: Wanida Printing, 2018



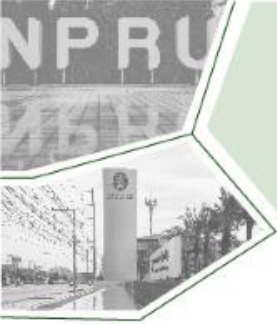


# Good prescribing practice for RDU:

## Antibiotic prophylaxis in simple wound ,

**1) Do not use antibiotics as protection against infection in fresh wounds from accidents** that are not cause by animal bites / human bites due to the possibility of infection in the wound after cleaning and appropriate wound care (approximately 1%).





# Good prescribing practice for RDU:

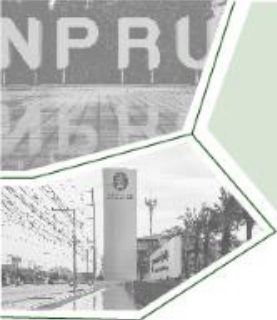
## Antibiotic prophylaxis in simple wound <sub>2</sub>

## 2) Consider using antibiotics when one of the following criteria is met.

- 2.1) Uneven edge incision, difficult to clean, or stitching the edges of the wound is not close to each other.
- 2.2) Incisions with a length of 5 centimeters.
- 2.3) A compaction wound caused by gripping the door forcefully.
- 2.4) Deep cuts to muscles, ligaments or bones.
- 2.5) Wound with wide spread necrosis.







# Good prescribing practice for RDU:

## Antibiotic prophylaxis in simple wound 3



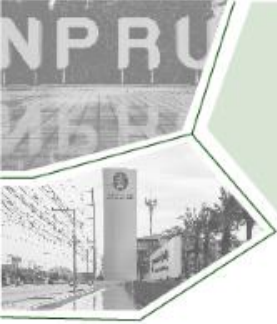
**2) Consider using antibiotics when one of the following criteria is met.**

2.6) There are dirty wounds that are difficult to remove or clean.

2.7) Contaminated surface with high bacteria invasion such as in feces, urine, dirty water, food scraps

2.8) A person with low immunity, such as 65 years of age, DM, cirrhosis, alcoholism, peripheral atherosclerosis, cancer, receiving immune suppressants, etc.





# Good prescribing practice for RDU:

## Antibiotic prophylaxis in simple wound 4

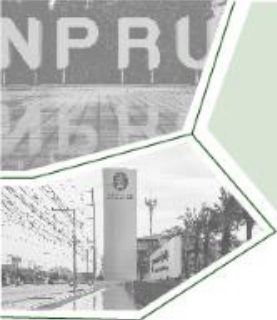
### 3) Use antibiotics for 2 days, with the following drugs

#### Dicloxacilin (ก)

- Children: 25-50 mg/kg per day, divided into 4 times a day (no more than 250 mg/time) on an empty stomach.
- Adolescents and adults: 250-500 mg 4 times a day on an empty stomach.







# Good prescribing practice for RDU:

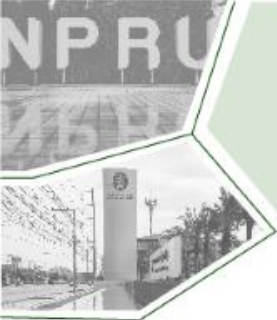
## Antibiotic prophylaxis in simple wound 6

**3.2) In case of allergic reaction to Penicillin, consider using the following drugs**

- **Erythromycin susp / dry syr (ก)**

-: Children: 20-40 or 30-50 mg / kg / day, divided to 3-4 times a day on an empty stomach. (But may change to take after if the patient is unwell)





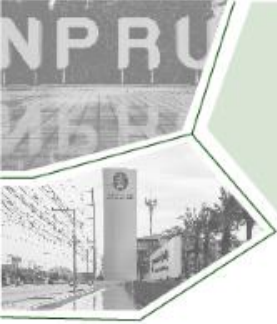
# Good prescribing practice for RDU:

## Antibiotic prophylaxis in simple wound 7

### - Roxithromycin (ก)

- : Children body weight  $<40$  kg : 5-8 mg / kg / day, divided to 2 times a day on an empty stomach, the child weighs  $> 40$  kilograms.
- : Adolescents and adults: 300 mg 1 time per day or divided into 2 times a day on an empty stomach.





# TOPIC SUMMARY

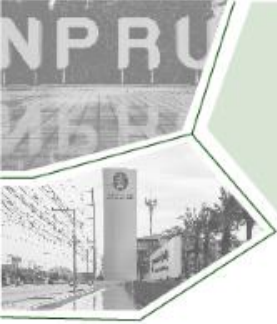
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Therefore we conclude that..

- Proper surgical wound care management can promote fast healing and recovery of the patient.
- Appropriate implementation of medical management on Basic Surgical Care level aids in the improvement of patient's quality of life.





# Thank You!

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