

# **Wound Healing**

1. Inflammatory phase (days 1 to 6)
2. Fibroproliferative phase (day 4 to week 3)
3. Maturation/remodeling phase (week 3 to 1 year)

# **Inflammatory Phase**

Vasoconstriction

Coagulation

Vasodilation and increased permeability

Chemotaxis

Cell migration

Cellular response

# Cellular response

Neutrophils (24-48 hours)

Macrophages (48-96 hours)

Lymphocytes (5-7 days)

# **Fibroproliferative Phase (Day 4 to Week 3)**

Matrix formation

Angiogenesis

Epithelialization

# **Maturation/Remodeling Phase (Week 3 to 1 Year)**

# **Factors Affecting Wound Healing**

Genetic

Systemic Health

Vitamins

Drugs

# Local Wound Factors

Oxygen delivery

Infection

Radiation therapy

# **Wound Evaluation**

Wound history

Components of wound evaluation

Condition of surrounding tissue and wound margins

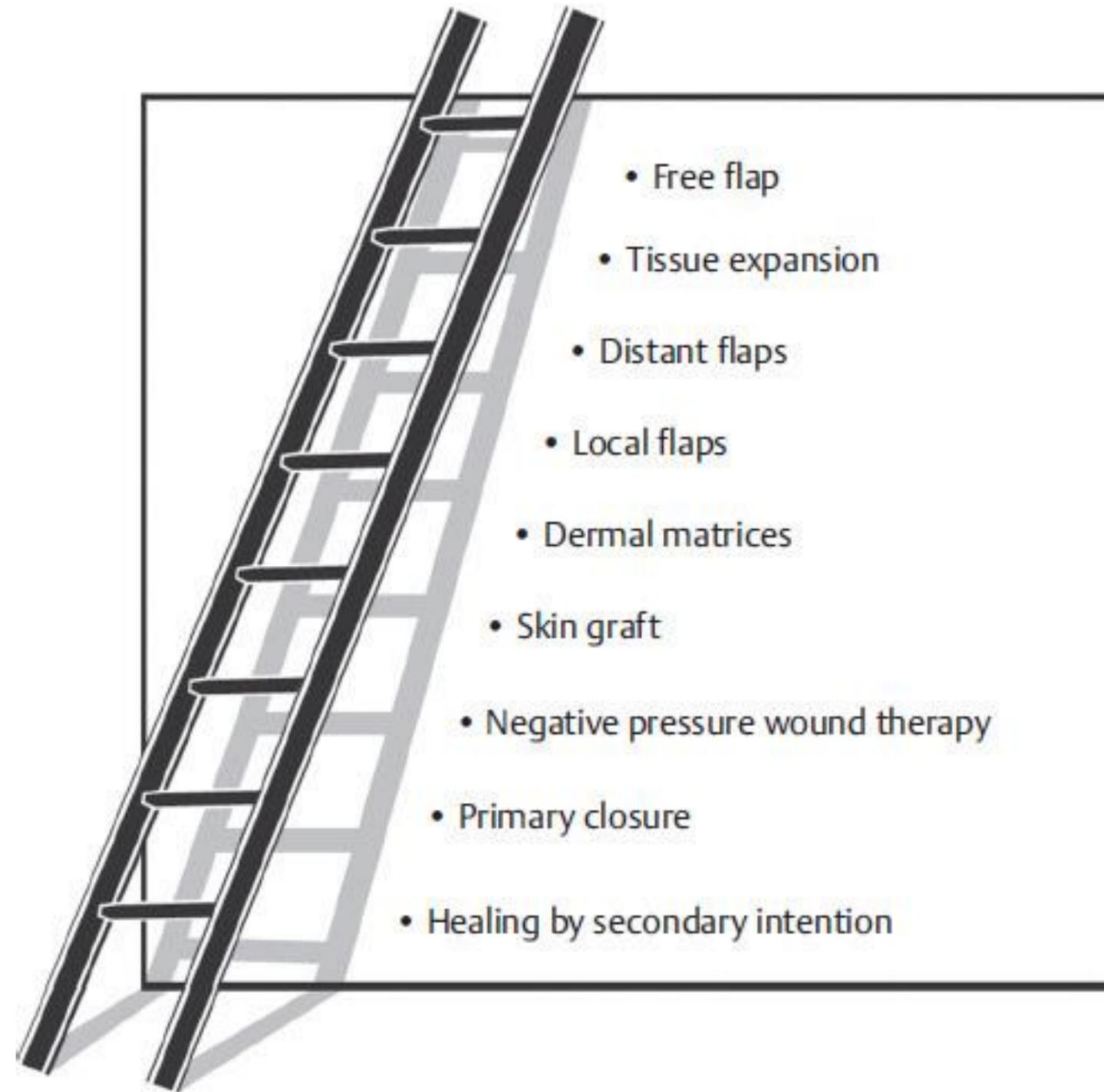
Condition of the wound bed

# Laboratory Studies

Imaging

# Diagnostic Tests

# **Reconstructive Ladder**



# **Wound Healing Adjuncts**

Hyperbaric oxygen

Platelet-rich plasma

Stem cells

Honey

Biologic dressings

Vacuum-assisted closure

# Considerations

Functional impact

Durability

Individualize treatment to the patient

Appearance

Make sure the solution is not more complicated than the problem