SAĞLIK BİLİMLERİ ÜNİVERSİTESİ
KARTAL DR. LÜTFİ KIRDAR
EĞİTİM VE ARAŞTIRMA HASTANESİ

Yara BAKIM ÜRÜNLERİ, VE VAK

Doç. Dr. Gaye FİLİNTE

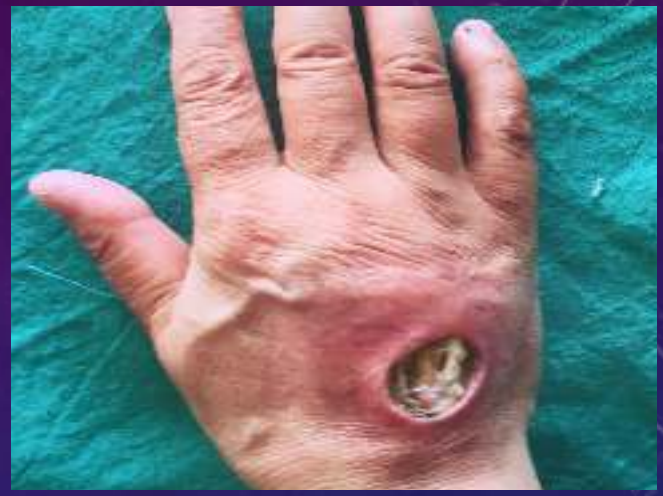
Kartal Dr. Lütfİ KIrdar Eğİtİm ve AraştIrma Hastanesİ

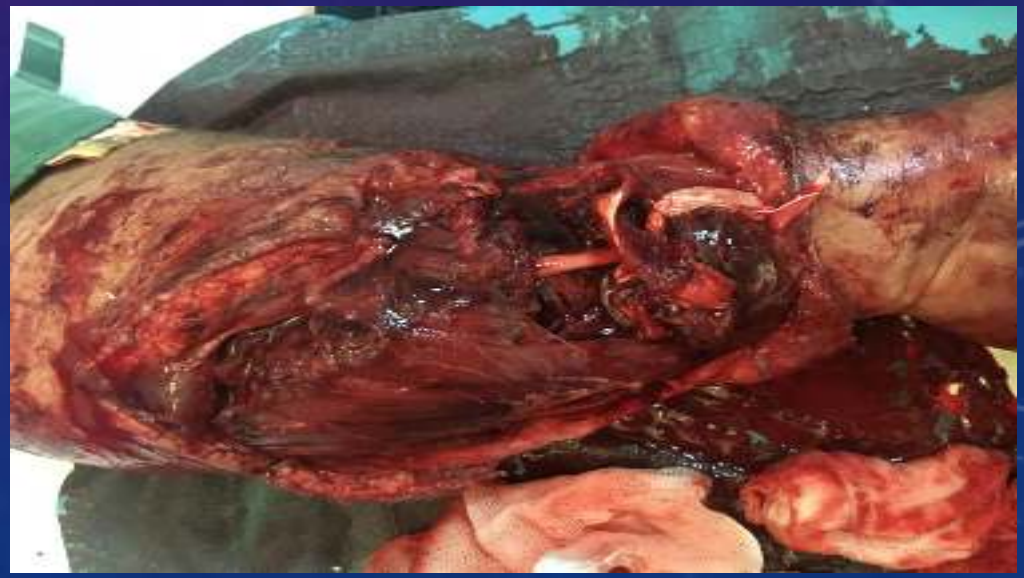
Plastİk, Rekonstrüktİf ve Estetİk Cerrahİ Klİnİğİ

yara ve YanIk Tedavİ merkezİ

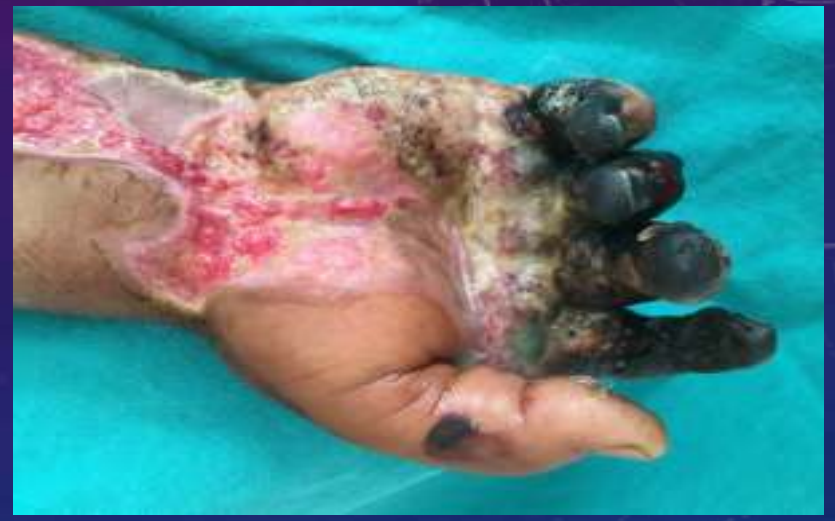
Yara

- Akut travmatik yara
- Kronik Yara
- Yara iyileşmesi
- Çevre ve hastaya ait faktörler
- Yardımcı ürünlerin kullanımı
- İyileşme



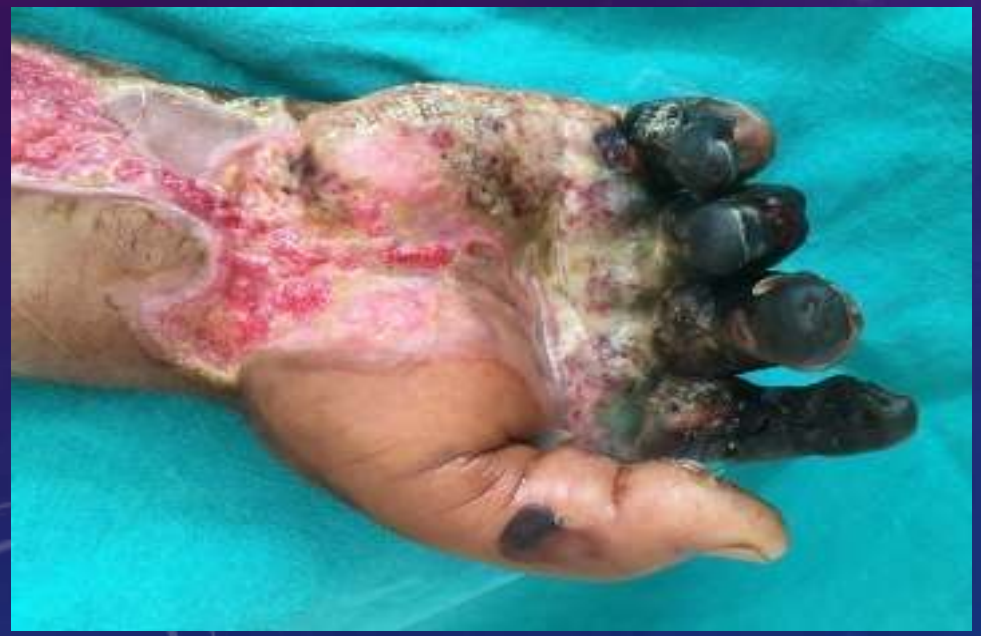


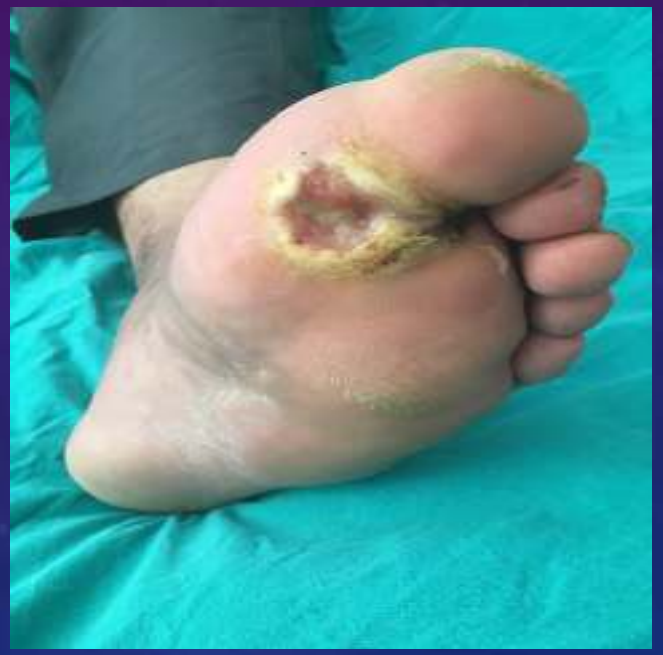
Temel Yara BakIm Prensİplerİ



- Ölü canlı doku ayırımı
- İyileşme ve fonksiyon sağlanması
- İyileşme için gerekli durumların sağlanması
- Aşırı ve uzamış inflamasyonu engellemek
- İnfeksiyonun ve iyileşmeyi engelleyen diğer durumları ortadan kaldırmak
- Skar oluşumunu en aza indirmek
- Yara debridmanı sırasında anesteziyi sağlamak

AKUT olmayan ve KronİK yara



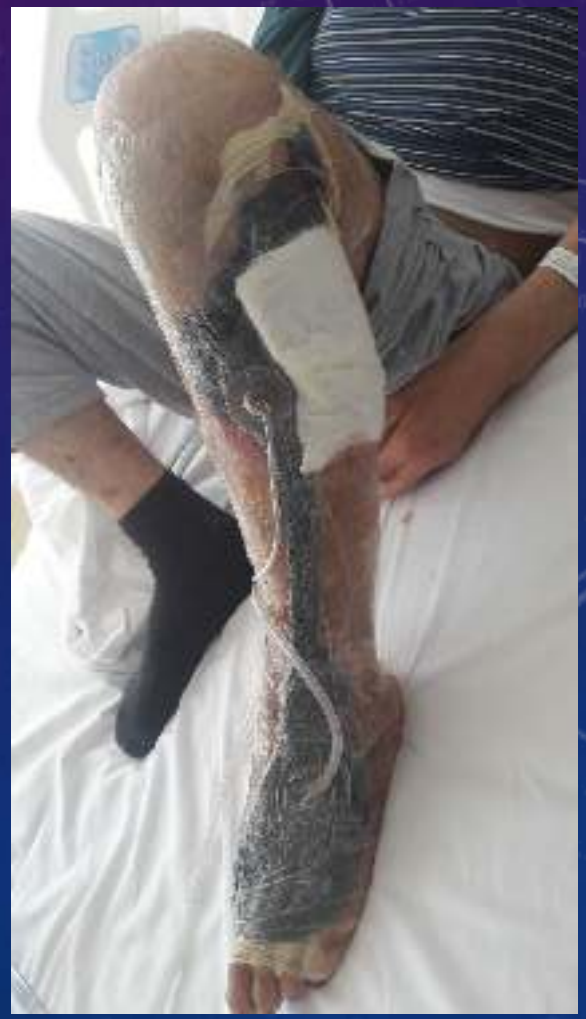


KronİK yara

- Hekim, yardımcı sağlık personeli, hasta işbirliği
- Tekrarlayan
- Uzun süren
- Yüksek maliyetli
- Yaşam kalitesini düşüren

GELİŞMİŞ YARA PANSUMANLARI

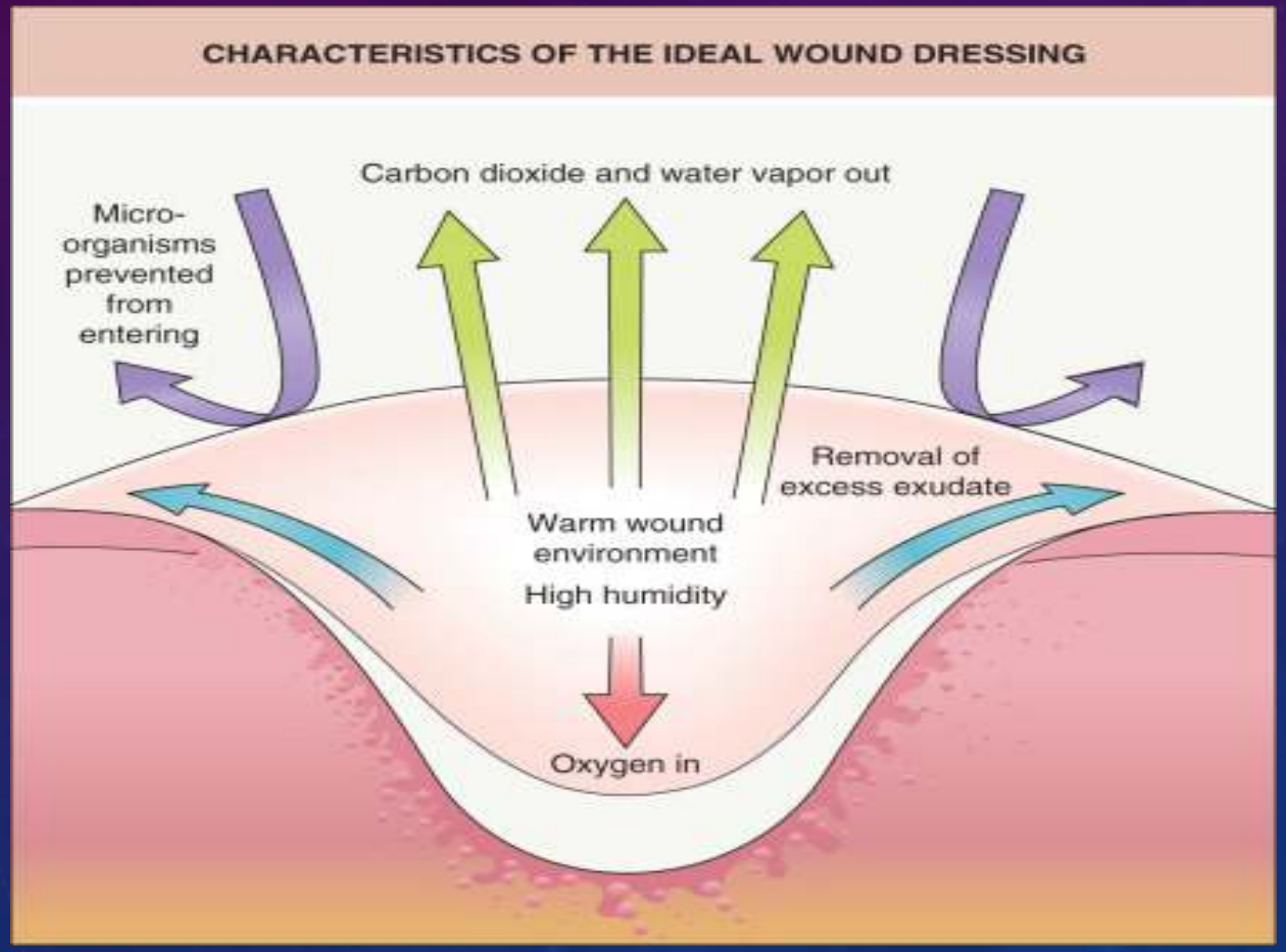
- Antimikrobiyal
- Hidrasyon
- Granülasyon
- Eksuda yönetimi
- Minimum yapışma
- Koku yönetimi



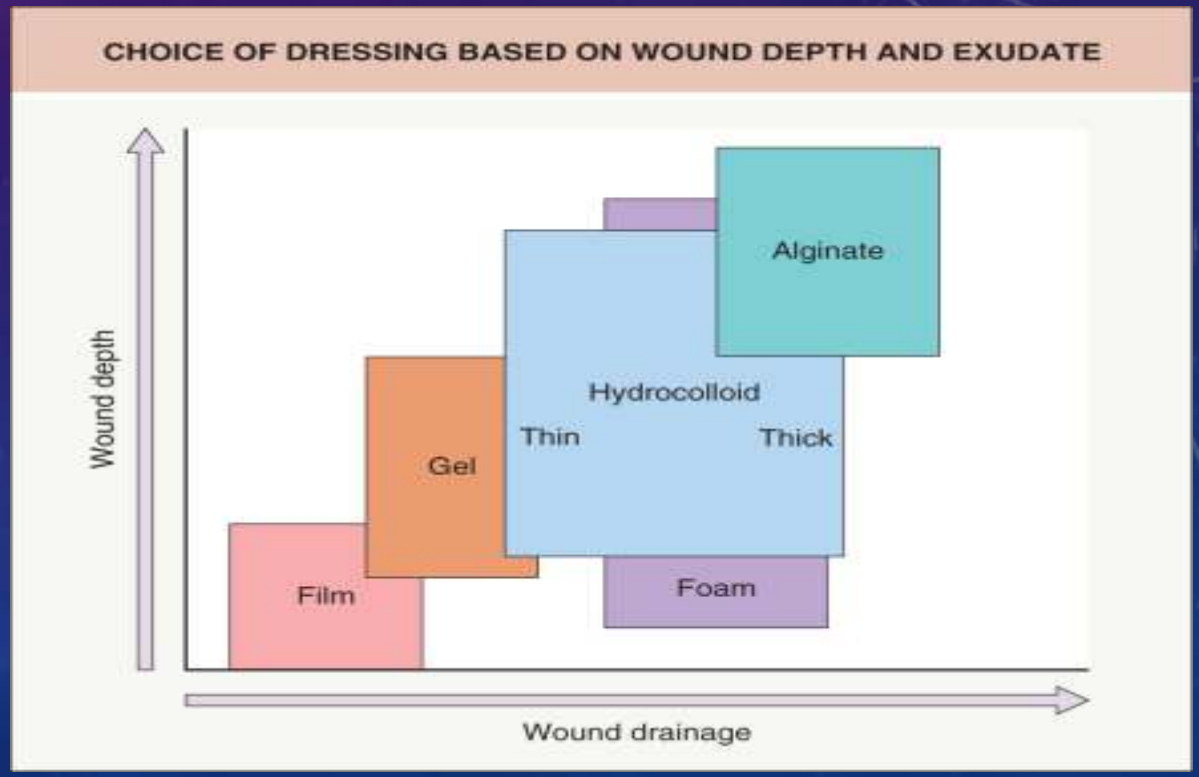
Yara Örtülerİ, YardImcI ürünler

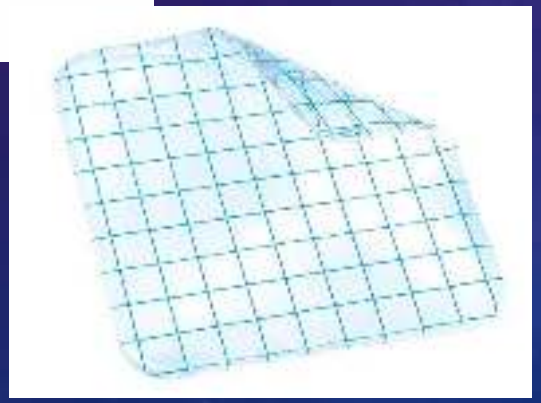
- Tüm yaralara uygulanabilecek ideal bir yara örtüsü yoktur
- Yara örtüleri iyileşmeyi hızlandırdığı gibi, ağrıyı ve enfeksiyonu azaltır ve daha iyi bir görünüm sağlayabilir
- Nemli ortam yara iyileşmesini hızlandırır

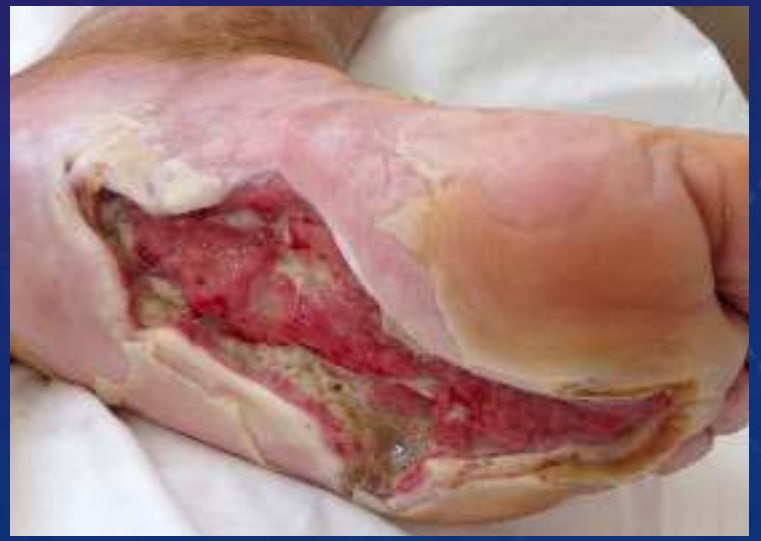
İdeal yara örtüsü



CHARACTERISTICS OF AN IDEAL DRESSING – COMPARISON OF MOISTURE-RETENTIVE DRESSINGS					
	Comfort	Absorbency	Pain relief	Easy to re-apply	Debridement
Films			+		+
Foams	+	++	+	+	
Hydrogels	++	+	++	+	++
Alginates	++	++		+	+
Hydrocolloids	+	++	+	+	+







Dressings for Preventing Pressure Ulcers: A Meta-analysis

Lei Huang, MD, ET; Kevin Y. Woo, PhD, RN, ACNP, GNP(C), FAPWCA; Li Bao Liu, MD; Rui-Juan Wen, BSN; Ai-Ling Hu, MD, ET; and Cheng-Gang Shi, MD

ABSTRACT

The purpose of this analysis is to determine the effectiveness of dressing material in the prevention of pressure ulcers. Results showed that hydrocolloid, foam, and film were more effective than a standard care protocol in patients at risk for pressure ulcers.

KEYWORDS: pressure ulcer prevention, wound dressing, meta-analysis

INTRODUCTION

A pressure ulcer (PrU) is a localized injury to the skin and/or underlying tissue that is primarily caused by excessive or prolonged pressure, especially over bony prominences.[1] In addition to pressure, other mechanical forces such as shear, contribute to tissue injury as 1 layer of tissue slides over the deeper structure in opposite directions. Friction is described as the resistance between 2 surfaces (eg, skin and linen) that usually gives rise to superficial lesions. The mechanisms responsible for actual tissue damage are linked to excessive deformation of cells, disruption of cytoskeletal architecture, obstruction of lymphatic drainage, reduced blood flow, and ischemia. Increasing evidence suggests that moisture could potentiate shear and compromise normal barrier functions by causing the skin to swell, thus weakening intercellular bonds in the epidermal layer. Excess moisture, together with elevated skin surface temperature, creates a local environment or microclimate that renders the skin vulnerable to breakdown.

Despite recent advances in knowledge and technologies, the prevalence and incidence of PrUs around the world have virtually remained unchanged. In Britain, the incidence of PrUs was estimated to be 10.2% across the spectrum of healthcare settings, and as high as 59% of PrUs were found specifically in acute care hospitals.[2] A recent analysis of minimum data set in Canada indicated that the prevalence of PrUs was estimated to be between 4.5% and 8.1% in long-term-care settings and 10.0% and 14.0% in complex continuing-care settings from 2010 to 2013.[3] According to the results of 9 international PrU prevalence surveys from 1989 to 2005, including a total of 447,930 patients,[4] PrU prevalence rates ranged from 9.2% in 1989 to 18% in 2004. The highest prevalence was estimated at 77.3% in long-term and acute care. The incidence of PrU in many individuals with spinal cord injury is close to 30%.[5] The burden of PrUs as a chronic disease is far-reaching and enormous. It is estimated that more than $1 billion are spent on the prevention and management of PrUs each year in the United States,[6] and prevention and management of PrU is account for 4% of the total health service gross charge in the United Kingdom.[7] The average costs associated with the treatment of Stage IV PrUs and related complications in the United States were $129,248 for a single episode of hospitalization.[8] Living with PrU is can be devastating and lead to social isolation, loss of independence, depression, anxiety, pain, and financial encumbrance. Pressure ulcers have been linked to a number of adverse patient outcomes, including prolonged hospital stay, decline in physical functioning, and death. In fact, the mortality rate increased by 2- to 4-fold among critical care patients who developed PrUs.[9]

With the growing concern in patient safety, quality of care, and healthcare resources, PrUs are monitored and tracked by healthcare organizations as a benchmark for performance. The US Centers for Medicare & Medicaid Services has stimulated federal guidelines for the prevention and early treatment of PrUs. According to best practice recommendations, individuals who are at risk may benefit from therapeutic surfaces, regular repositioning, and other interventions that are aimed at pressure redistribution and shear elimination. More recently, focus has been placed on the use of dressing materials to protect bony prominences and other areas that are vulnerable to pressure, shear, and friction. Dressings are relatively economical, compared with other existing interventions; however, their effectiveness in preventing PrUs remains equivocal. With the emergence of new technology, some modern dressings incorporate multiple layers of material, such as an outer covering that is

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ABSTRACT

The purpose of this analysis is to determine the effectiveness of dressing material in the prevention of pressure ulcers. Results showed that hydrocolloid, foam, and film were more effective than a standard care protocol in patients at risk for pressure ulcers.

KEYWORDS: pressure ulcer prevention, wound dressing, meta-analysis

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RECONSTRUCTIVE

Effect of Different Wound Dressings on Cell Viability and Proliferation

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Melbourne, Victoria, Australia

Background: Many new dressings have been developed since the early 1980s. Wound healing comprises dynamic, granulation/vascularization, and epithelialization phases. An optimum microenvironment and the absence of cytotoxic factors are essential for epithelialization. This study examines the effect of extracts of different wound dressings on keratinocyte survival and proliferation.

Methods: Keratinocyte cultures were exposed for 48 hours to at least three extracts of each of the following wound dressings, which were tested in triplicate: Acticoat, Aquacel Ag, Aquacel, Algisite M, Avance, Comfeel Plus transparent, Contreet-H, Hydrasorb, and SeaSorb. Silicone extract provided the reference material. Controls were included of cells cultured in medium that had been incubated under conditions identical to those used with the extracts. Cell survival ([3-[4,5-dimethylthiazol-2-yl]-2,5-diphenyltetrazolium bromide reduction] and proliferation [5-bromo-2'-deoxyuridine incorporation] were measured.

Results: Extracts of silver-containing dressings (Acticoat, Aquacel Ag, Contreet-H, and Aquacel) were most cytotoxic. Extracts of Hydrasorb were less cytotoxic but markedly affected keratinocyte proliferation and morphology. Extracts of alginate-containing dressings (Algisite M, SeaSorb, and Contreet-H) demonstrated high calcium concentrations, markedly reduced keratinocyte proliferation, and affected keratinocyte morphology. Extracts of Aquacel and Comfeel Plus transparent induced small but significant inhibition of keratinocyte proliferation.

Conclusions: The principle of minimizing harm should be applied to the choice of wound dressing. Silver-based dressings are cytotoxic and should not be used in the absence of infection. Alginate dressings with high calcium content affect keratinocyte proliferation probably by triggering terminal differentiation of keratinocytes. Such dressings should be used with caution in cases in which keratinocyte proliferation is essential. All dressings should be tested in vitro before clinical application. [Plast. Reconstr. Surg. 117 (Suppl.): 70S, 2006.]

Table 1. Dressings

Dressing	Manufacturer	Major Component	Silver
Acticoat	Smith & Nephew	Polyethylene mesh	Yes
Aquacel-Ag	ConvaTec	CM cellulose	Yes
Aquacel	ConvaTec	CM cellulose	No
Algisite M	Smith & Nephew	Alginate	No
Avance	SSL	Polyurethane foam	Yes
Comfeel	Coloplast	Hydrocolloid/CM cellulose	No
Contreet-H	Coloplast	Hydrocolloid/alginate	Yes
Hydrasorb	Kendall	Polyurethane	No
SeaSorb	Coloplast	Alginate/CM cellulose	No
Silicone	Corning	Silicone	No

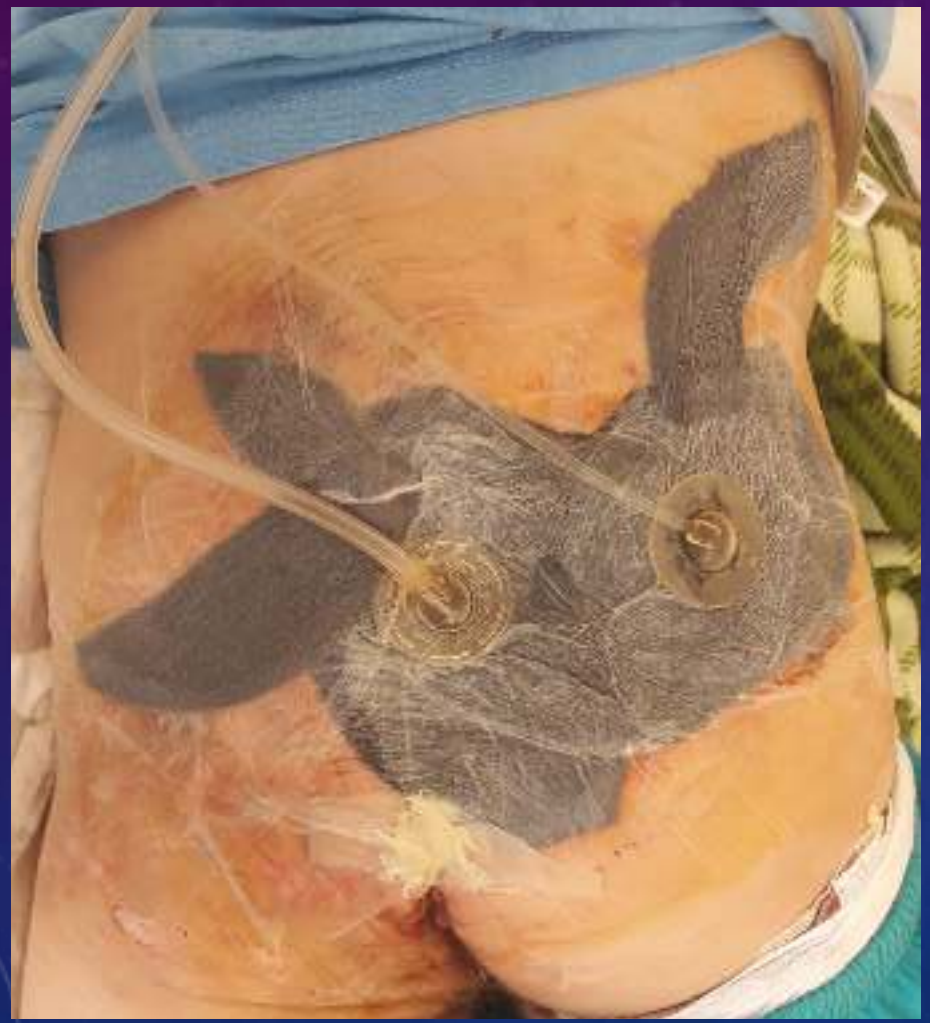
CONCLUSIONS

The choice of a suitable wound dressing should involve the principle of minimizing harm. Silver-based dressings are cytotoxic and should not be used unless wound infection is a significant risk. Current alginate dressings with high calcium content should be used cautiously in situations in which optimal keratinocyte proliferation is essential. All dressings should be tested in vitro before clinical application to en-

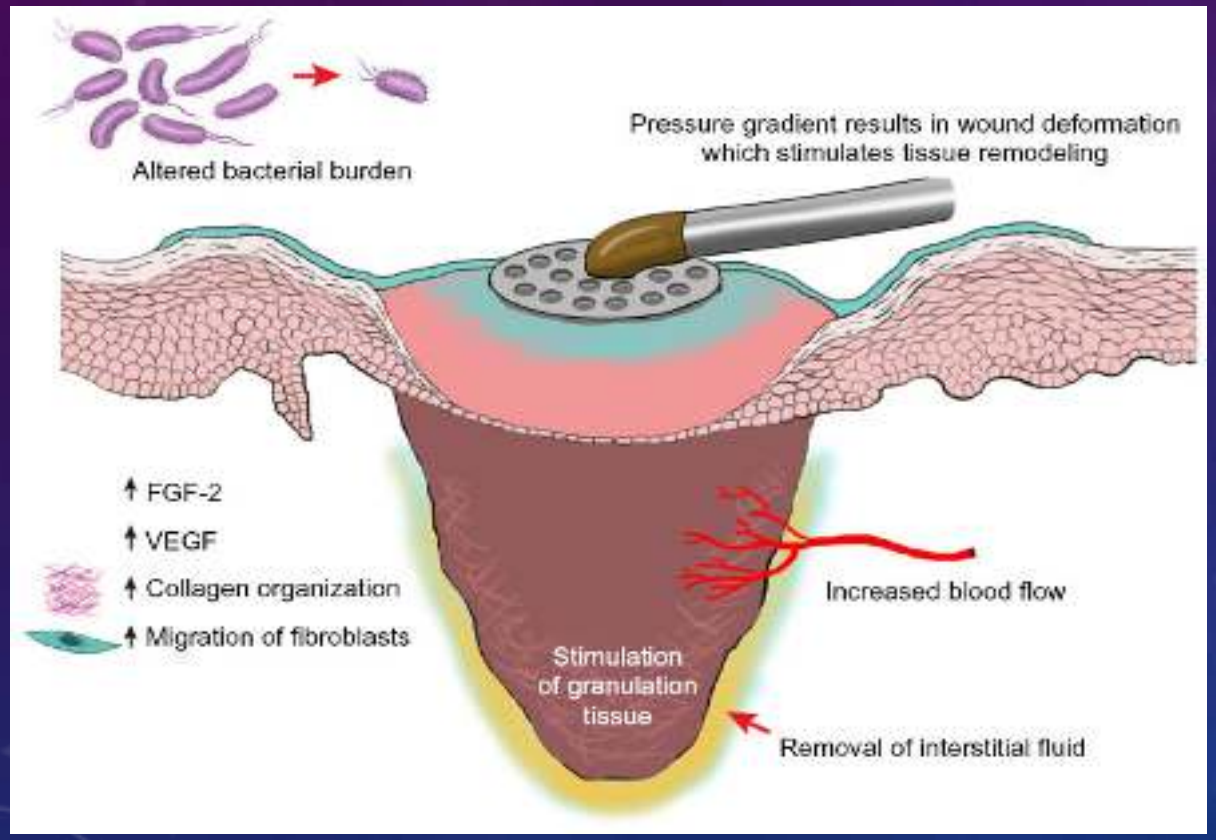
NegatİF BasInçlI yara kapama Yöntemlerİ

- Negative Pressure Wound Therapy (NPWT)
- 1990’larda tanımlandı,
- Subatmosferik basıncın yaraya iletilmesi
- Vacuum-Assisted Closure (VAC) sistem
- Poliüretan veya polivinil alkol köpük yara üzerine
- Drape yardımıyla havayla temasın kesilmesi
- Plastik bir tüp yardımıyla vakum pompasının bağlanması
- Ve negatif basınçlı bir ortam hazırlanması

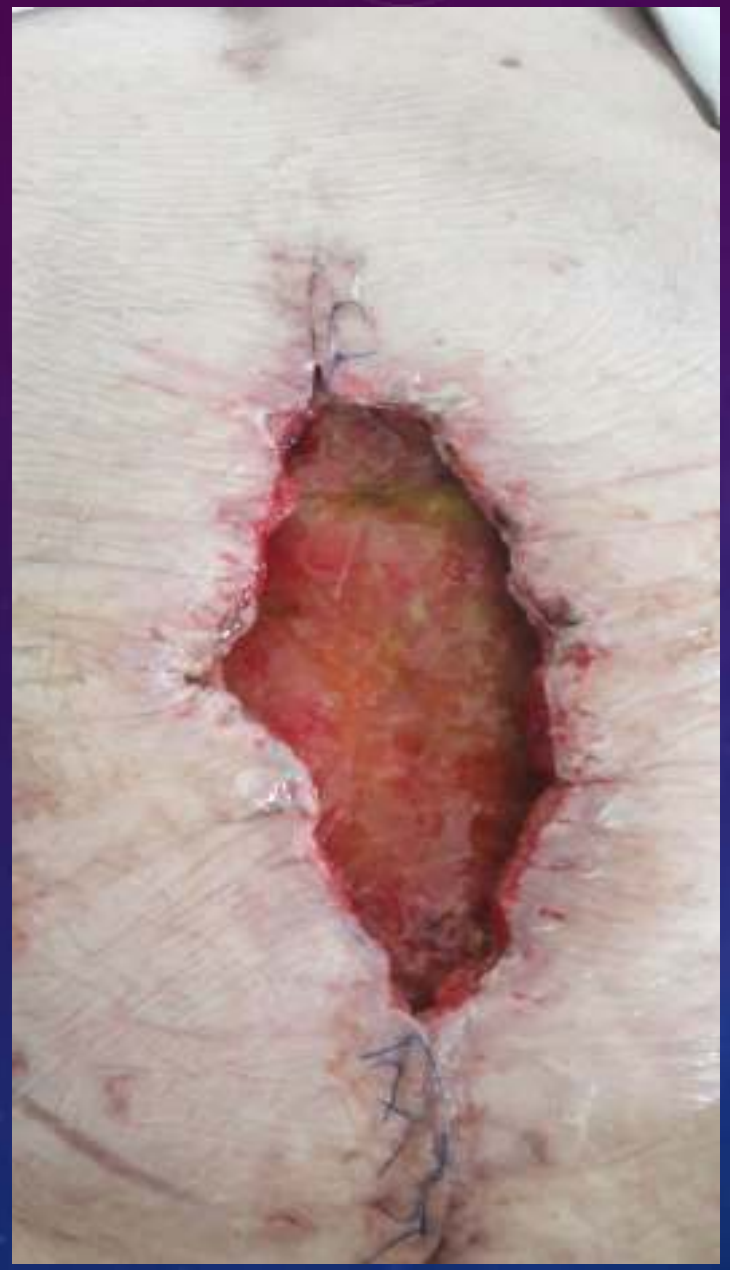
NPWT

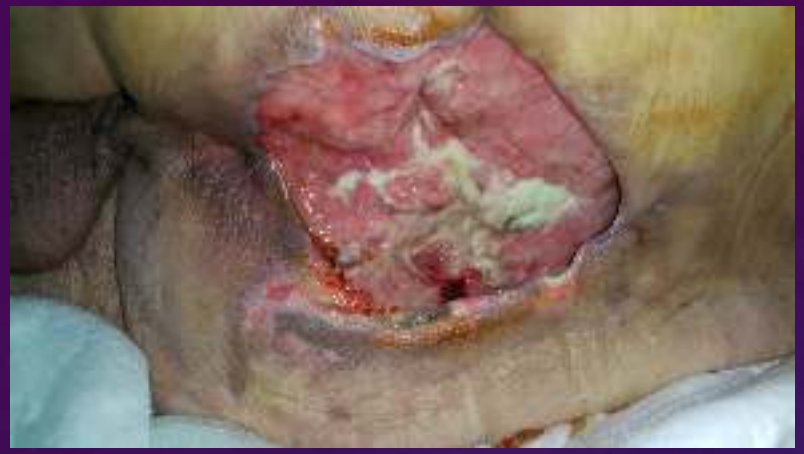


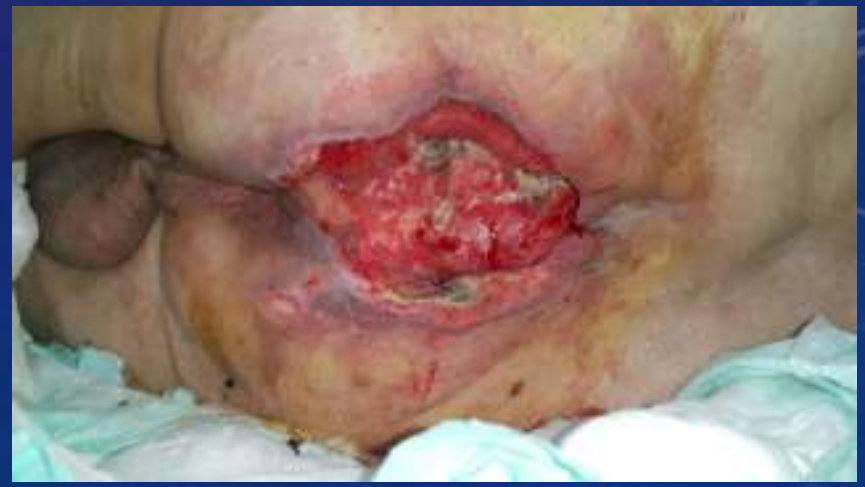
NPWT

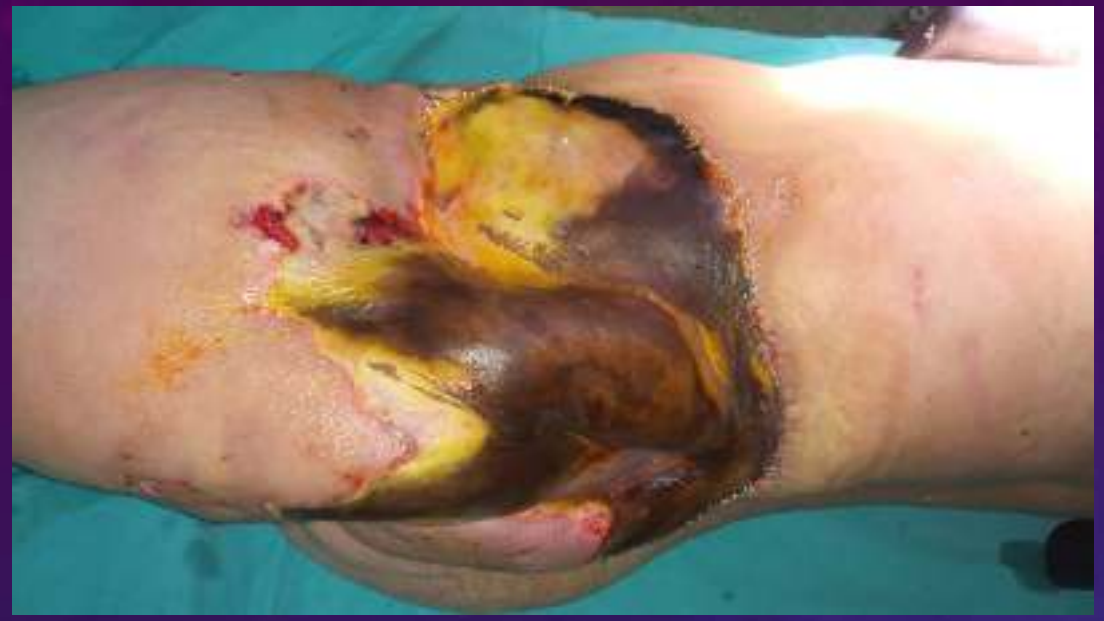


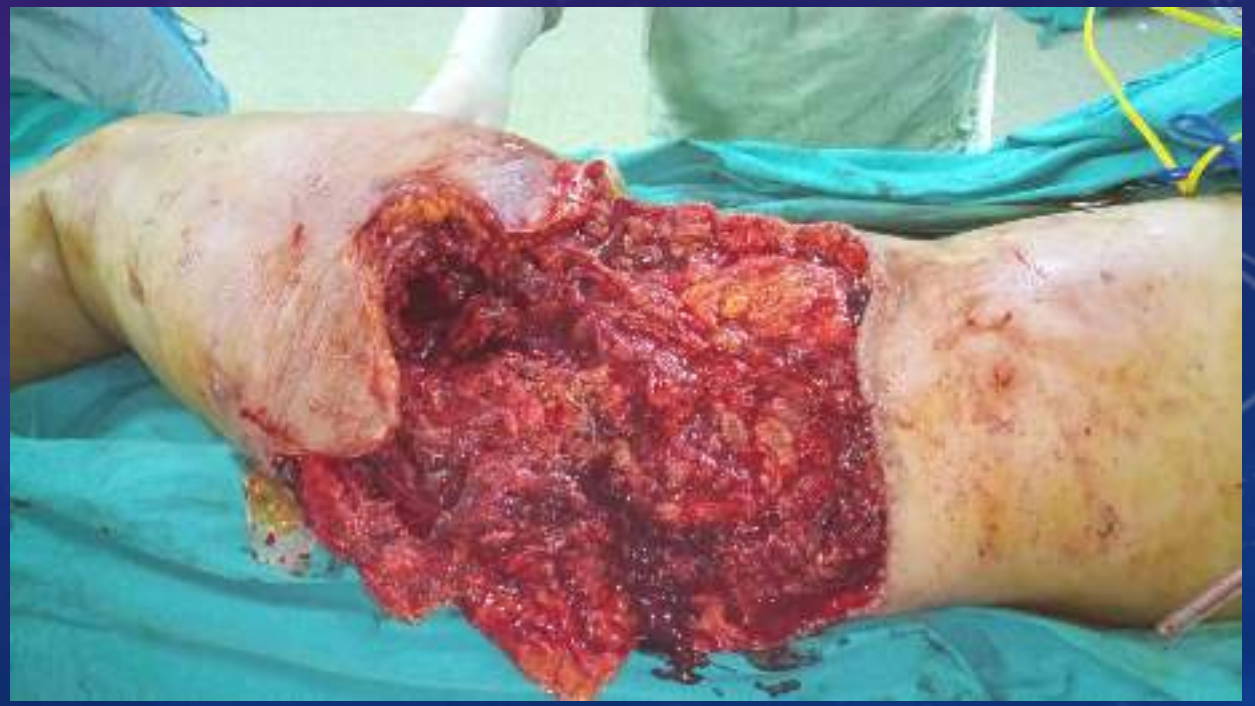
- **Negatif basınçlı ortam;**
- Interstisyel sıvıyı uzaklaştırır
- Anjiogenezisi uyarır
- Dolaşımı ve lenfatik drenajı arttırır

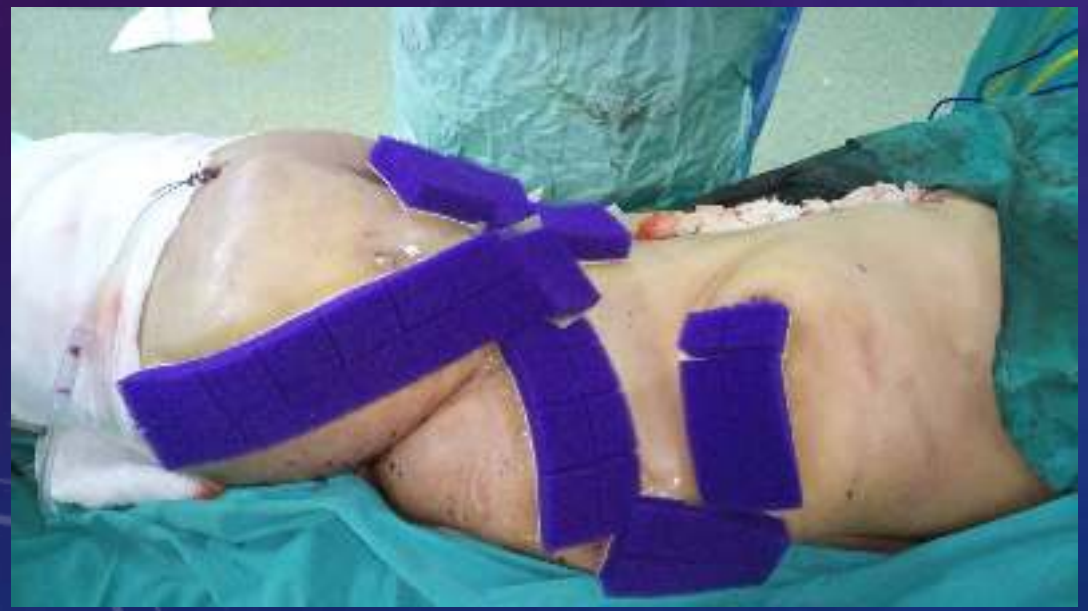


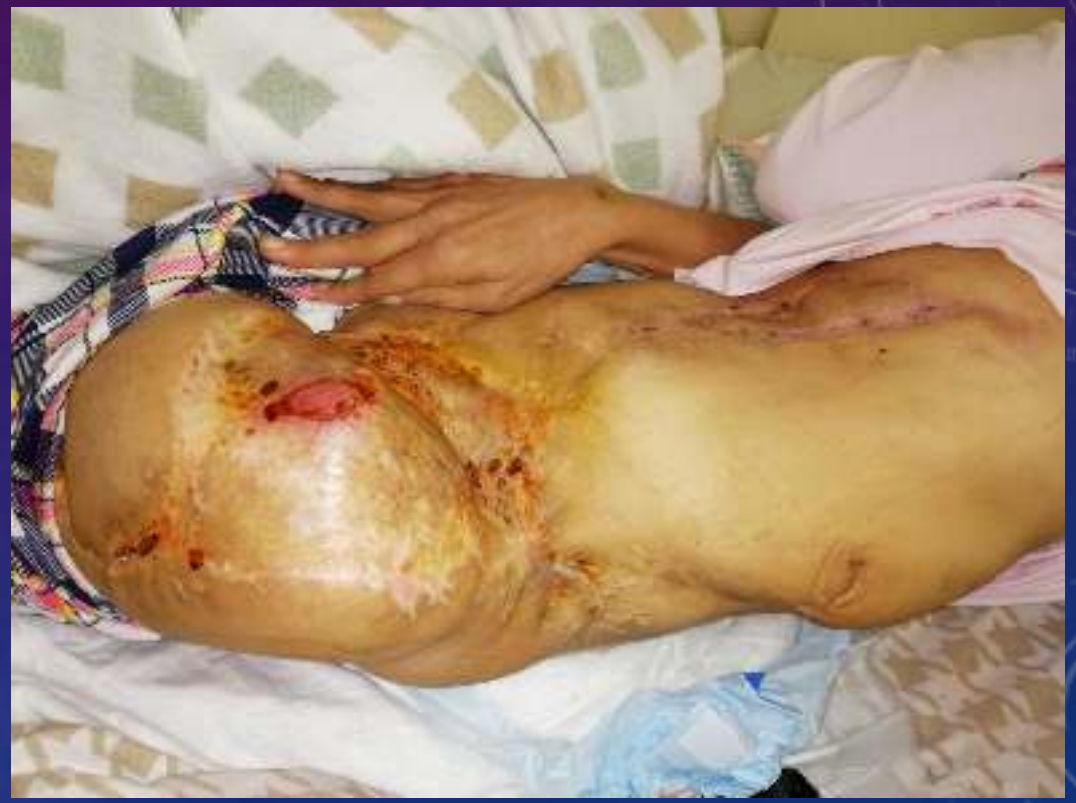


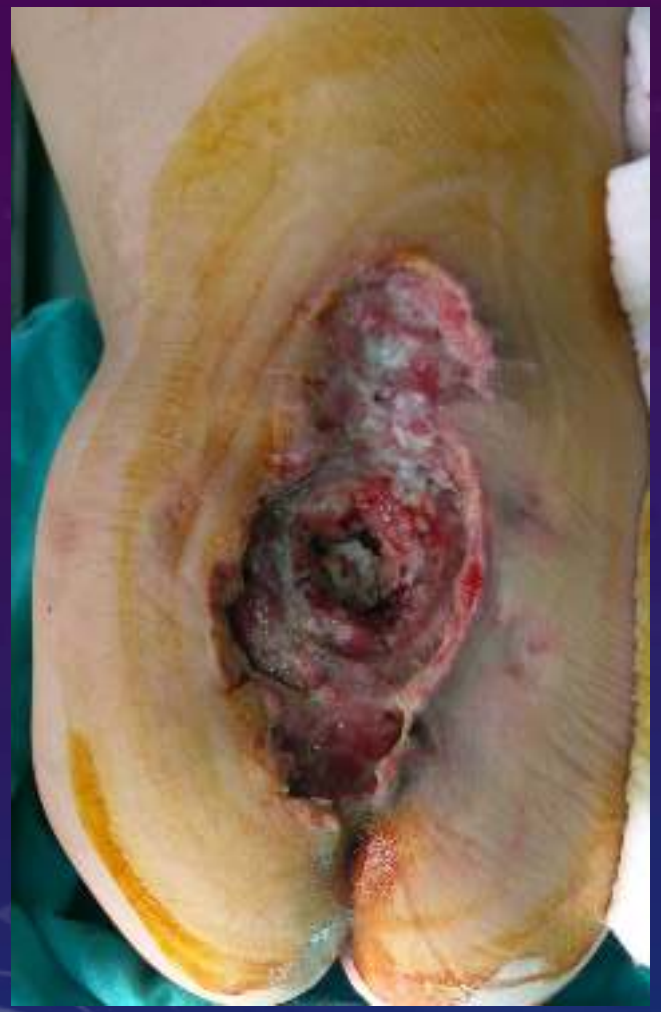


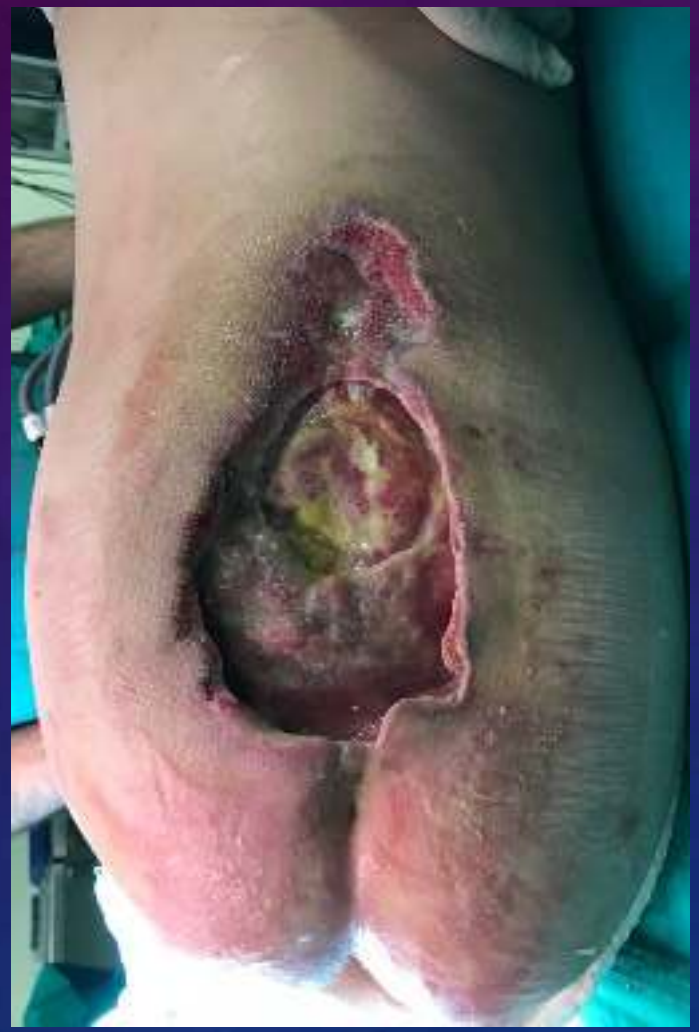


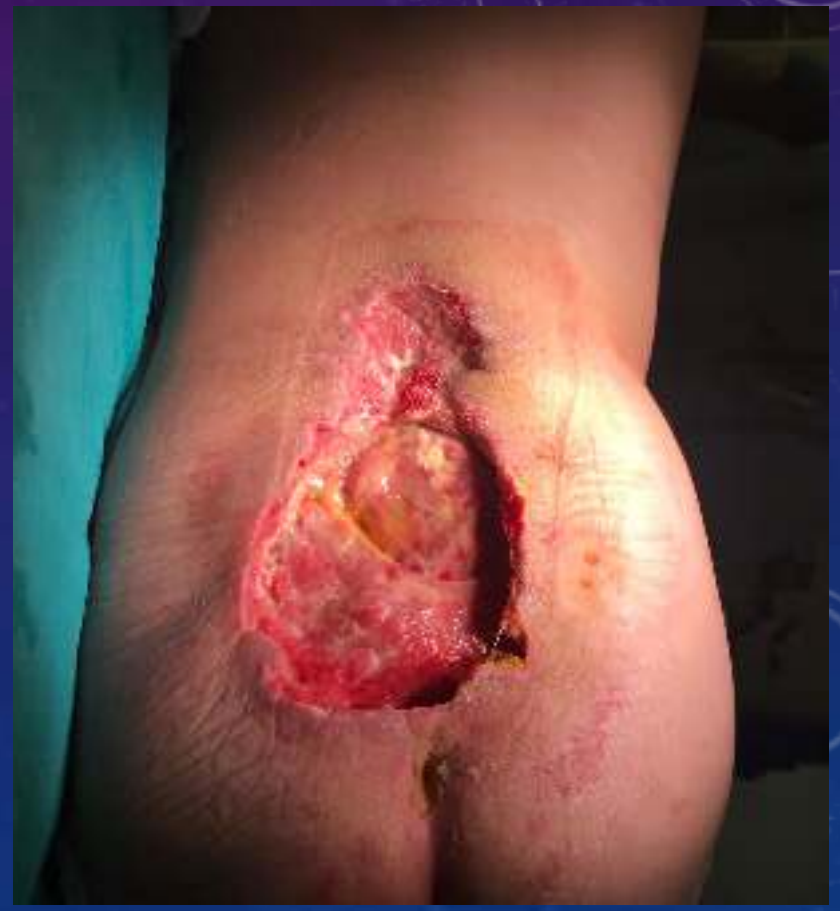


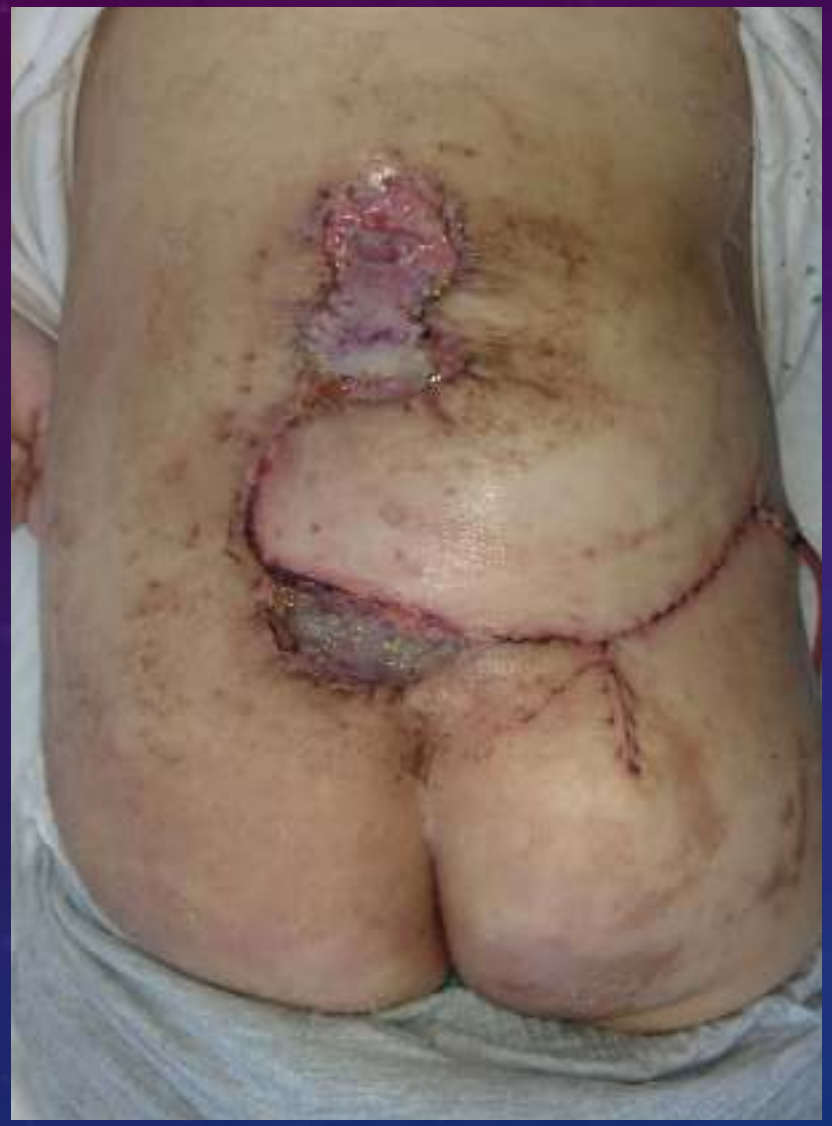


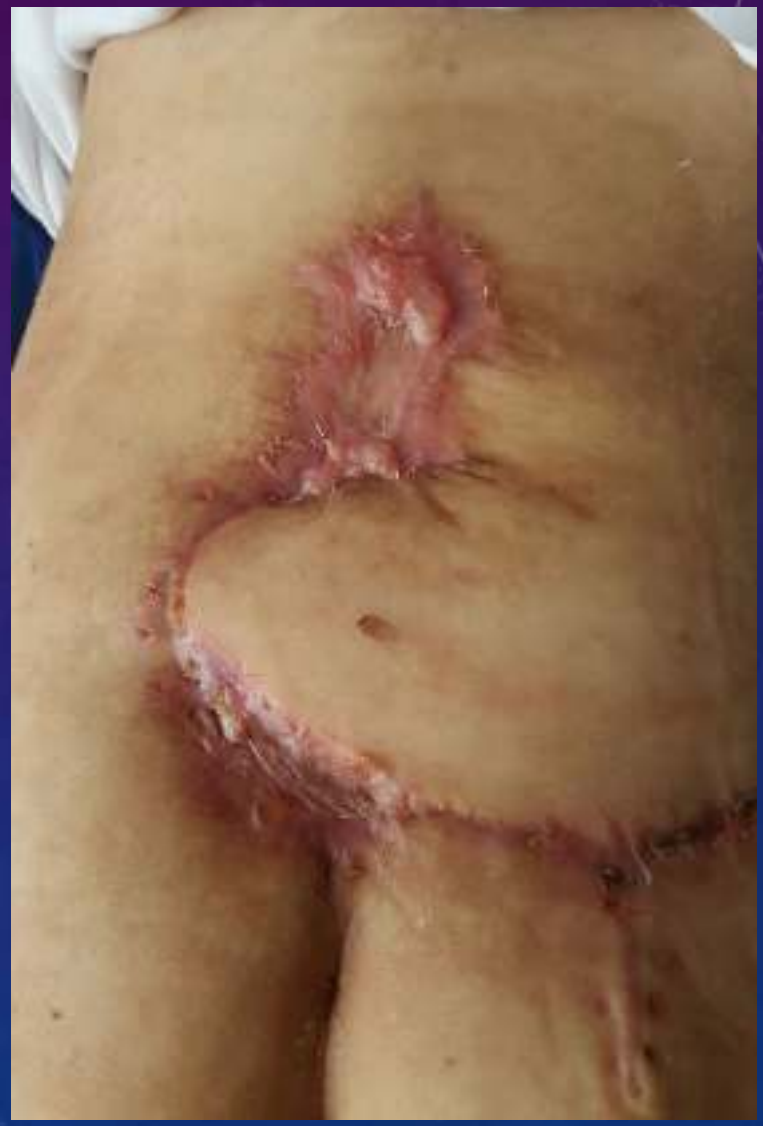


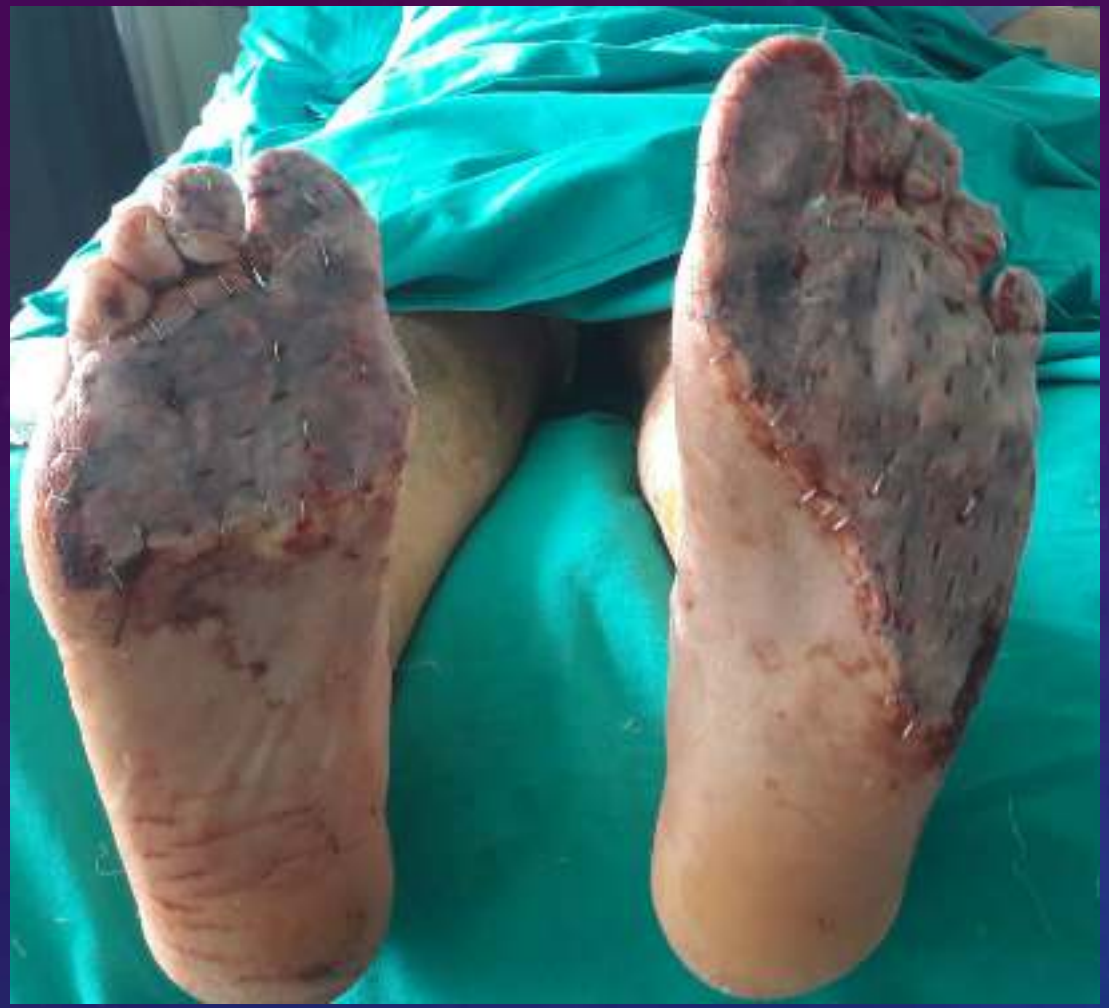


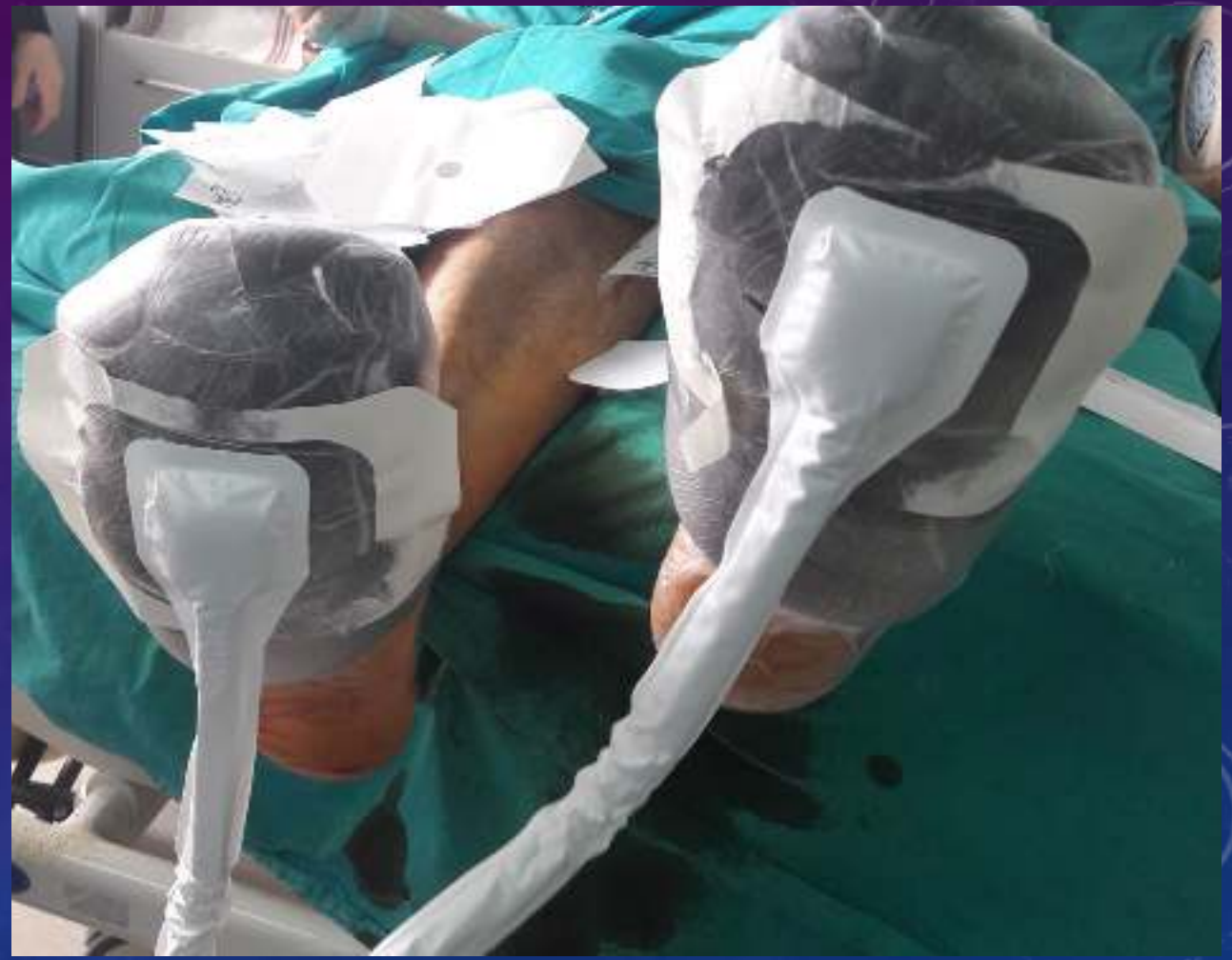




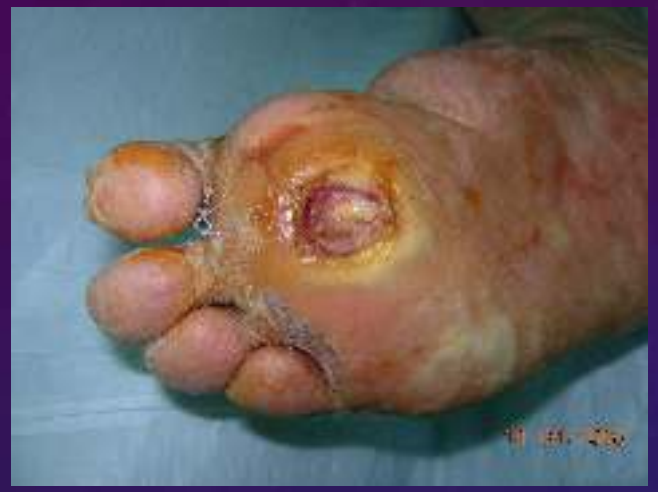


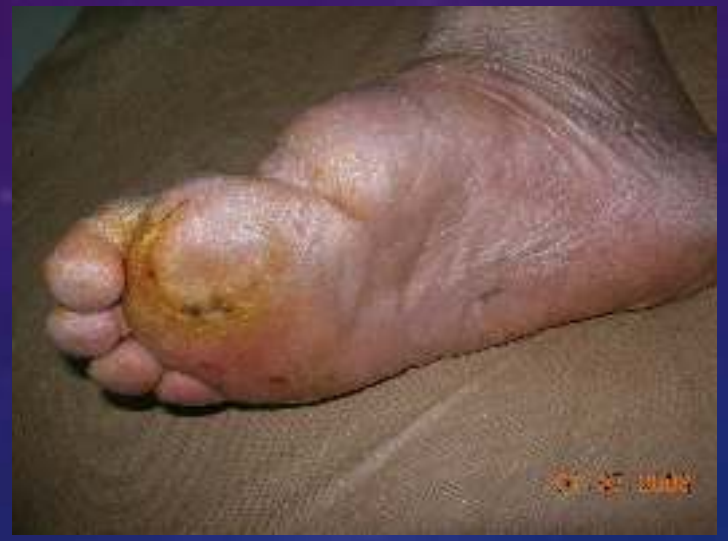


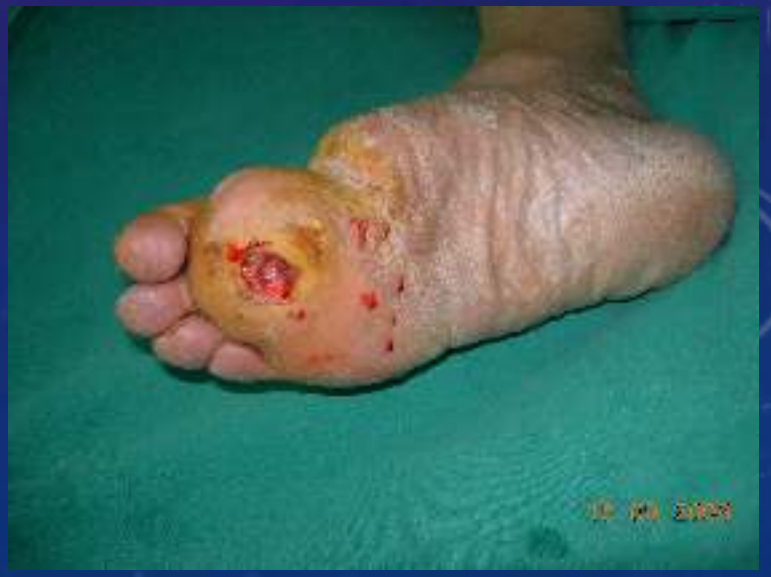




SONUÇ







SONUÇ

- Multidisipliner çalışmak
- Hastayı bir bütün olarak ele almak
- Hastanenizde bulunan imkanların farkında olmak (HBO tedavi merkezi, yara polikliniği, yara hemşiresi, kronik yara konseyi)
- Uzun süreli bir planlama yapmak
- Hastaya detaylı bilgi vermek ve dökümantasyon (medikolegal)

TEŞEKKÜRLER