Comparative Study Between Recent Protocols For Management Of Extensive Burns During The Acute Phase

Essay

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دراسة تقارنية بين البرتوكولات الحديثة لعلاج الحروق الشديدة خلال المرحلة الحادة

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مقدمة من

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LIST OF ABBREVIATIONS

ACS : Abdominal compartment syndrome

ARF : Acute renal failure

%burn : %total body surface area

BEE : Basal energy expenditure

COX : Cyclooxygenase

CEA : Cultured epithelial autograft

D5W : Dextrose 5% in water solution

EGF : Epidermal growth factor

IAH : Intra-abdominal hypertension

KGF : Keratinocyte growth factor

NF-KB : Nuclear factor-kappa B

RL : Ringer Lactate.

TBSA : Total body surface area

W xsec/g xK: (Watt times seconds of heat per gram mass times

degrees Kelvin)

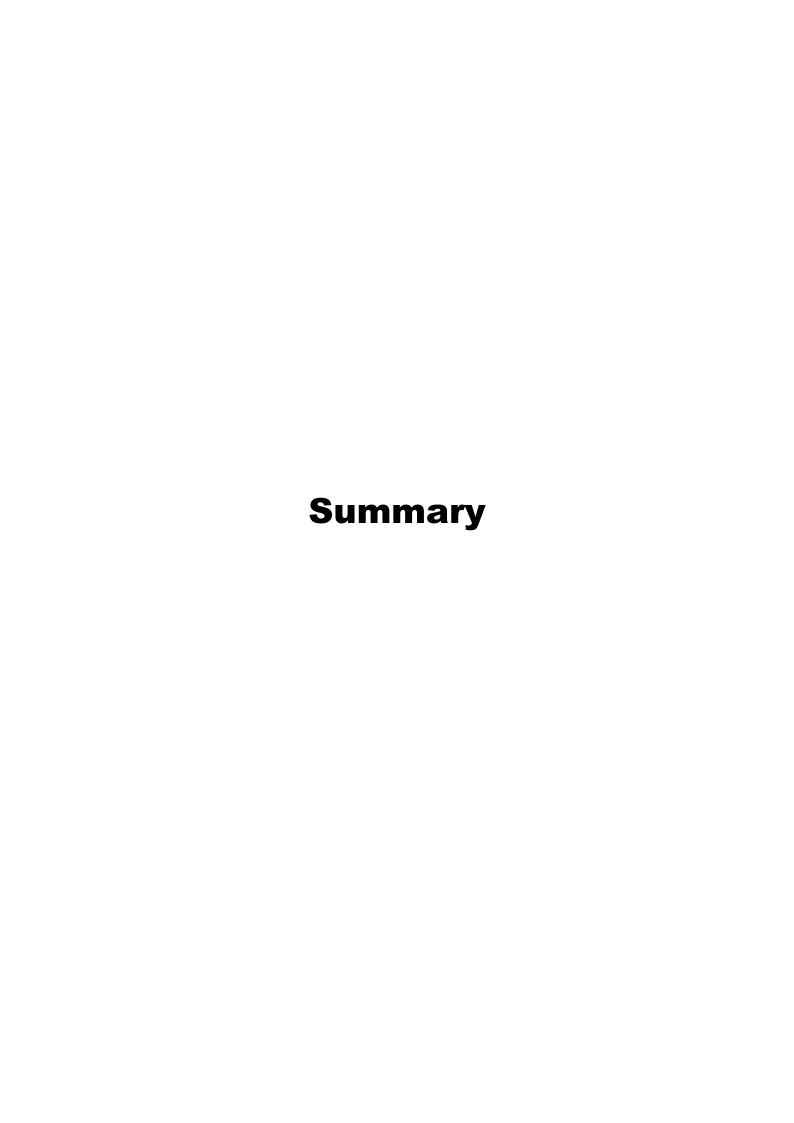
Introduction and Aim of the work

Pathophysiology of burn including degrees of burn and complication of extensive burn

Initial management of extensive burn (acute phase) including facilities, equipment required in the specialized centers

Different protocols in management of extensive burn





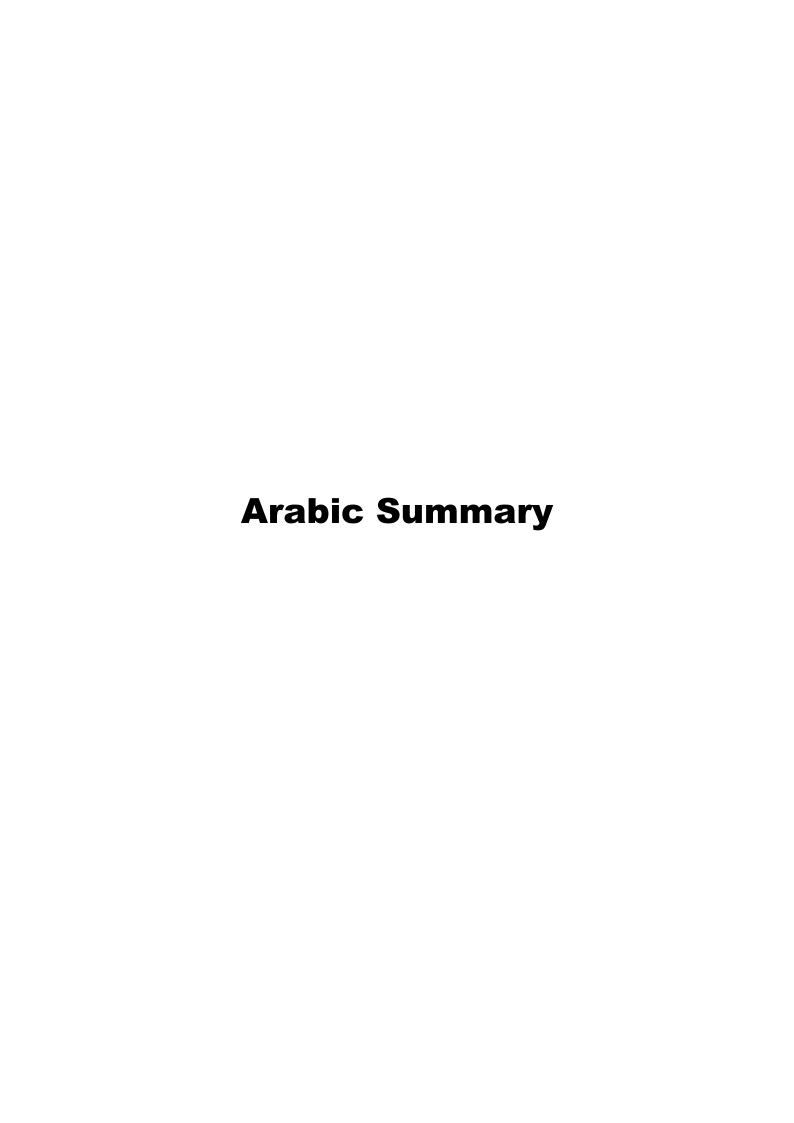


Table (13): Available Bioactive Temporary Skin Substitutes (Miller E and Gay, S 2002)

Table (13): Available Bloactive Temporary Skin Substitutes (Willer E and Gay, S 2002)							
Product	Company	Origin	Layers	Category	Uses	How supplied	
Human allograft	Skin bank	Human cadaver	Epidermis and dermis	Split thickness skin	Temporary coverage of large excised burns	Frozen in rolls of varying size	
Pig skin Xenograft	Brennan Medical St. Louis, Mo	Pig dermis	Dermis	Dermis	Temporary coverage of partial thickness and excised burns	Frozen or refrigerated in rolls	
Human amnion	On site procurement	Placenta	Amniotic membrane	Epidermis Dermis	Same as above	Refrigerator	
Oasis	Healthpoint LTD San Antonio, Tx	Xenograft	Extracel lunar wound matrix from small intestine submucosa	Bioactive Dermal like Matrix	Superficial burns, Skin graft donor sites, Chronic wounds	Room T° storage Multiple sizes 3x3.5cm 7x20cm	
Biobrane	Dow Hickam/Bertek pharmaceuticals	Synthetic with added denatured bovine collagen	Bilayer product outer silicone Inner nylon mesh with added collagen	Synthetic epidermis end dermis	Superficial partial thickness burns, Temporary cover of excised burns	Room T° storage 15x20 inch 10x15cm 5x15inch 5x5 inch	
Transcyte	Smith & Nephew Wound Management Largo, FL	Allogenic Dermis	Bilayer product Outer silicone Inner nylon seeded with neonatal fibroblasts	Bioactive Dermal Matrix Components on Synthetic dermis and epidermis	Superficial to mid-Partial thickness burns, Temporary coverage of excised burns	Frozen 5x7.5inch sheets	