

Grafting in Veterinary Medicine: A Mini Review

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Abstract

Grafting refers to a surgical procedure to move tissue from one site to another on the body, or from another creature, without bringing its own blood supply with it. Instead, a new blood supply grows in after it is placed. There were many types of grafts for reconstruction defects in many organs as bone graft, skin graft and tendon graft

Keywords: Grafting; Vet; Medicine

Introduction

The term "graft" is mostly pointed to either an allograft or an auto graft or Xenograft.

Bone grafting is referring to the process by which bone is transferred from a source (donor) to site (recipient). Due to trauma from accidents by speedy vehicles [1].

Bone graft: Bone grafting is a surgical procedure that replaces missing bone in order to repair bone fractures that are extremely complex, pose a significant health risk to the patient, or fail to heal properly. Bone grafts may be autologous (bone harvested from the patient's own body, often from the iliac crest), allograft (cadaveric bone usually obtained from a bone bank), or synthetic (often made of hydroxyapatite or other naturally occurring and biocompatible substances) with similar mechanical properties to bone. Bone graft can be harvested from the iliac crest, proximal tibia, proximal hummers, proximal femur, ribs and sternum. Cancellous bone graft is superior to cortical bone graft. Usually autologous cancellous bone graft is used as fresh grafts whereas allografts are employed as an alloimplant. None of the available type of bone grafts possesses all these properties therefore; a single type of graft cannot be recomm-ended for all types of orthopedic abnormalities. Bone grafts and implants can

be selected as per clinical problems, the equipments available and preference of the surgeon [1,2].

Skin grafting can reduce the course of treatment and hospitalization needed, and can also improve function and appearance. There are two types of skin grafts: Split-thickness skin grafts [epidermis + part of the dermis] Full-thickness skin grafts [epidermis + entire thickness of the dermis]. Skin grafts are an excellent modality used to reconstruct wound located on the limbs and other areas of the body. It has been used for over a century to resurface superficial defects of many kinds of these types the auto skin graft, which was used to repair the injury or area that has lost tissue that too big to sew the edges together directly [3]. In dogs, skin grafting is primarily indicated for injuries to the skin of the extremities where skin immobility precludes tissue shifting skin grafts can be i) auto grafts, which has same animal as donor as well as the recipient, ii) Allografts in which the donor and the recipient are different animals of same species, iii) Xenografts are grafts in which the donor and recipient belong to different species, iv) Isografts are the grafts between the Identical twins or genetically same individuals. Based on the graft size and design it can be classified as, i) Mesh graft, ii) Punch graft, iii) Pinch graft, and iv) Strip graft, which can be of full-thickness or split thickness [4,5]. With the successful outcomes of using skin allograft where the site of operation renewed with

the same color of donor skin with a little hair formation [2].

On other hands the using of peritoneal graft for reconstruction tendon defect was with the most convincing and efficient outcomes. This graft was most beneficial for repairing the defective tendon [6].

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