

Summary

Guided bone regeneration (GBR) is a reconstructive procedure of alveolar ridge using membranes. This procedure is indicated when there is no sufficient bone for implantation, or in the case of optimal implant installation for esthetic or functional needs. GBR can be performed before implant placement, when there is not enough bone for initial stability of implants and less predictable outcomes (staged approach), or performed simultaneously with implantation (combined approach). GBR techniques have been used for vertical and horizontal ridge augmentations with acceptable results.

In this study, 12 patients were included (12 males patients) who had missing maxillary and mandibular anterior and premolar teeth. Patients were divided into two groups A&B. The implants were delayed loaded after insertion and patients were subjected for observation period of six month during which a series of radiographic pictures , probing depth and bleeding index were taken. The crestal bone height was measured at mesial and distal side of the implants.

The results had shown that GBR technique of implant had shown to be reliable methods if proper selection of the patient and proper surgical procedure had been done.

Conclusion

1. Presently available data demonstrates GBR therapy to be a predictable and successful procedure to be augmented bone in a horizontal or vertical direction at sites exhibiting insufficient bone volume for implant placement under standard conditions among the techniques introduced for vertical ridge augmentation GBR is a successful technique, although distraction osteogenesis allows for vertical bone augmentation than other techniques. For horizontal ridge augmentation resorbable membrane has successful and predictable results.
2. The survival rate obtained through the GBR technique utilized in this study is conditioned by a series of important factors first of all the careful selection of the patients, excellent primary stability, selection of the implant (length, diameter and surface treatment) and a traumatic surgery, proper fixation of GBR membrane by bone tacks or screws.
3. Proper patient selection with good motivation, free of any systemic diseases, parafunctional habits and adequate bone height increase the success rate.

Recommendations

It is recommended to use GBR with fixation to achieved strong bone anchorage, further investigation (histomorphometric) and long-term evaluation are certainly needed to confirm the encouraging results of this clinical study.

It is recommended to use other parameters for assessment of implant success and stability by using RFA (resonance frequency analysis) the measurements results are used for making a significantly stronger bone anchorage implants.

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الملخص باللغة العربية

تحظى زراعة الأسنان باهتمام كبير من الباحثين في السنوات الأخيرة لتطورها لذلك استخدمت أحدث التقنيات لتقديم نتائج مرضية للمرضى وحل كثير من المشكلات التي تعوق زراعة الأسنان.

لقد اثبتت الدراسات في الفترة الأخيرة ان اسخدام الأغشية القابلة للتحلل مع تثبيتها فوق مشتقات العظام المصنعة لمعالجة الخلل العظمي الذي يتعارض مع وضع الزرعات مما يساعد على نمو العظم على اسطح الزرعات بشكل اسرع وافوى مما يساعد على حدوث الالتصاق بين العظم و الزرعات في هذه الرسالة جرى البحث على التطرق لأستخدام هذه الأغشية القابلة للتحلل في الجهة الأمامية م الفكين العلوي و السفلي واشتملت الدراسة على زرع اثني عشر زرعة من نظام ليجسى للأسنان ذات الجذر الواحد كما استخدمت مشتقات العظم للتغلب على الخلل العظمي الموجود في محل الزرعة وبعد انتعاء فترة المتابعة اتضح ان هذه الأغشية لها دور فعال و ناجح في ثبات الزرعات وقوتها مما يحقق رضاء المرض وحصولهم على أفضل نتائج.

التقرير السريري للأغشية القابلة للتحليل المثبتة في حراجة زرع الأسنان

رسالة مقدمة الى

كلية طب الفم و الأسنان – جامعة القاهرة

توطئة للحصول على درجة الماجستير في قسم

جراحة الفم والوجه والفكين

رسالة مقدمة من

الطبيبة / ماجدة محمد أبو العينين

دبلوم طب الفم و أمراض اللثة – جامعة القاهرة

كلية طب الفم والأسنان

جامعة القاهرة

٢٠١٤

المشرفون

أ.د. قدرى ناصر

أستاذ بقسم جراحة الفم و الوجه و الفكين

كلية طب الفم والأسنان

جامعة القاهرة

أ.د. خالد علام

أستاذ بقسم جراحة الفم و الوجه و الفكين

كلية طب الفم والأسنان

جامعة القاهرة

Abstract

Guided bone regeneration (GBR) is a reconstructive procedure of alveolar ridge using membranes. This procedure is indicated when there is no sufficient bone for implantation, or in the case of optimal implant installation for esthetic or functional needs. GBR can be performed before implant placement, when there is not enough bone for initial stability of implants and less predictable outcomes (staged approach), or performed simultaneously with implantation (combined approach). GBR techniques have been used for vertical and horizontal ridge augmentations with acceptable results.

In this study, 12 patients were included (12 males patients) who had missing maxillary and mandibular anterior and premolar teeth. Patients were divided into two groups A&B. The implants were delayed loaded after insertion and patients were subjected for observation period of six month during which a series of radiographic pictures, probing depth and bleeding index were taken. The crestal bone height was measured at mesial and distal side of the implants.

The results had shown that GBR technique of implant had shown to be reliable methods if proper selection of the patient and proper surgical procedure had been done.

Keywords:

Fixed Biodegradable -Implant Surgery

الملخص العربي

تحظى زراعة الأسنان باهتمام كبير من الباحثين في السنوات الأخيرة لتطورها لذلك استخدمت أحدث التقنيات لتقديم نتائج مرضية للمرضى وحل كثير من المشكلات التي تعوق زراعة الأسنان.

لقد اثبتت الدراسات في الفترة الأخيرة ان اسخدام الأغشية القابلة للتحلل مع تثبيتها فوق مشتقات العظام المصنعة لمعالجة الخلل العظمي الذي يتعارض مع وضع الزرعات مما يساعد على نمو العظم على اسطح الزرعات بشكل اسرع وافوى مما يساعد على حدوث الالتصاق بين العظم و الزرعات في هذه الرسالة جرى البحث على التطرق لأستخدام هذه الأغشية القابلة للتحلل في الجهة الأمامية م الفكين العلوي و السفلي واشتملت الدراسة على زرع اثني عشر زرعة من نظام ليجسي للأسنان ذات الجذر الواحد كما استخدمت مشتقات العظم للتغلب على الخلل العظمي الموجود في محل الزرعة وبعد انتعاء فترة المتابعة اتضح ان هذه الأغشية لها دور فعال و ناجح في ثبات الزرعات وقوتها مما يحقق رضاء المرض وحصولهم على أفضل نتائج.

الكلمات الدالة:

التقرير السريري - الأغشية القابلة للتحليل المثبتة

استمارة معلومات الرسائل التي تمت مناقشتها

الكلية : كلية طب الفم والأسنان. جامعة القاهرة القسم : جراحة الفم والوجه والفكين

1. الدرجة العلمية : ماجستير دكتوراه

2. بيانات الرسالة

عنوان الرسالة باللغة العربية:

التقرير السريري للأغشية القابلة للتحليل المثبتة في جراحة زرع الأسنان

عنوان الرسالة باللغة الإنجليزية:

Clinical Assessment of Fixed Biodegradable Membrane in
Implant Surgery

التخصص الدقيق : جراحة الفم والوجه والفكين

تاريخ المناقشة : 2014/5/10

3. بيانات الطالب:

الاسم: ماجدة محمد أبو العينين الجنسية: مصرية النوع : أنثى

العنوان : 26 ش 28 امبابه - جيزة رقم التليفون: 01061238092

جهة العمل : مستشفى رمدا امبابه

4. المشرفون على الرسالة :

أ.د. قدرى ناصر أستاذ بقسم جراحة الفم و الوجه و الفكين كلية طب الفم والأسنان جامعة القاهرة

أ.د. خالد علام أستاذ بقسم جراحة الفم و الوجه و الفكين كلية طب الفم والأسنان جامعة القاهرة

5. مستخلص الرسالة : (Abstract)

1-5 باللغة العربية :

تحظى زراعة الأسنان باهتمام كبير من الباحثين في السنوات الأخيرة لتطورها لذلك استخدمت أحدث التقنيات لتقديم نتائج مرضية للمرضى وحل كثير من المشكلات التي تعوق زراعة الأسنان.

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البحث على التطرق لأستخدام هذه الأغشية القابلة للتحلل في الجهة الأمامية م الفكين العلوي و السفلي واشتملت الدراسة على زرع اثني عشر زرعة من نظام ليجسي للأسنان ذات الجذر الواحد كما استخدمت مشتقات العظم للتغلب على الخلل العظمي الموجود في محل الزرعة وبعد انتعاش فترة المتابعة اتضح ان هذه الأغشية لها دور فعال و ناجح في ثبات الزراعات وقوتها مما يحقق رضاء المرض وحصولهم على أفضل نتائج.

الكلمات الدالة:

التقرير السريري - الأغشية القابلة للتحلل المثبتة

مستخلص الرسالة (باللغة الإنجليزية)

باللغة الأجنبية: 2-5

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The results had shown that GBR technique of implant had shown to be reliable methods if proper selection of the patient and proper surgical procedure had been done.

Keywords:

Fixed Biodegradable -Implant Surgery

6. أهم النتائج التطبيقية التي تم التوصل إليها:

1. Presently available lable data demonstrates GBR therapy to be a predictable and successful procedure to be augment bone in a horizontal or vertical direction at sites exhibiting insufficient bone volume for implant placement under standard conditions among the techniques introduced for vertical ridge augmentation GBR is successful technique , although distraction osteogenesis allows for vertical bone augmentation than other techniques. for horizontal ridge augmentation resorbable membrane has successful and predictable results.
2. The survival rate obtained through the GBR technique utilized in this study is conditioned by series of important factors first of all the careful selection of the patients, excellent primary stability, selection of the implant (length , diameter and surface treatment) and a tramatic surgery, proper fixation of GBR membrane by bore tacks or screw .
3. Proper patient selection with good motivation, free of any systemic diseases, parafunctional habits and adequate bone height increase the success rate.

1. ما هي الجهات التي يمكن أن تستفيد من هذا البحث :

1-7 كليات طب الفم والأسنان والمعاهد البحثية :

جامعة القاهرة ، جامعة الأسكندرية، جامعة عين شمس

√

لا

2. هل توجد علاقة قائمة بإحدى هذه الجهات : نعم

في حاله نعم انكر هذه الجهات : المستشفيات والمعاهد التعليمية

ما هي طبيعة العلاقة :

√

مشروع بحثي :

تعاون أكاديمي :

(انكر ما هي : لا)

مشروع ممول من جهة ثالثة

(

تذكر)

أخرى

3. هل توافق على التعاون مع جهات مستفيدة من خلال الجامعة :

لا (لماذا)

نعم

(أ) لتطبيق البحث

(ب) لاستكمال البحث

(ج) أخرى (تذكر)

4. هل تم نشر بحوث مستخرجة من الرسالة في مجالات أو مؤتمرات علمية

(تذكر مع جهة النشر والمكان والتاريخ)

Cairo Dental Journal 1 -10

2 -10

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5. هل سبق التقدم لتسجيل براءات اختراع (تذكر مع الجهة والمكان والتاريخ)

لا

6. هل توافق على إعطاء البيانات المذكورة في هذه الاستمارة لجهات أخرى .

نعم لا

توقيع المشرفين :

توقيع الطالب : ماجدة محمد أبو العينين

أ.د. قدري ناصر

أ.د. خالد علام

التاريخ:

وكيل الكلية للدراسات العليا