



Implant Restoration of Partially Edentulous Ridges: A Review of 121 Nigerian Patients

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Dental implant therapy has become an extremely predictable treatment for edentulism.¹ It has become an appropriate part of the general and specialty dental practice. Research has established the biological basis for, and documented the long-term predictability of, dental implants, which has promoted the acceptance of their clinical use worldwide.^{2,3} Implant dentistry has also changed the perspective of clinicians on many aspects of dental therapy. Dentists have witnessed a paradigm shift from the practice of saving teeth at all costs to one that considers extraction of compromised teeth to improve the aesthetics, function, and long-term prognosis of the entire dentition with the application of dental implant technology.² For some cases, such as the missing single tooth, implant therapy is becoming the standard of care because it is predictable and often more conservative than a conventional crown and bridge.^{3,4}

Recent evidence suggests that traditional/conventional methods of dental restoration (removable partial/full dentures/bridges) rather than implants are still widely practiced in Nigeria.⁵ This has been attributed to the cost of

Objective: Because of increasing health awareness, many Nigerian patients are demanding that their lost tooth/teeth be replaced with dental implants. This study reports the pattern and distribution of implant replacement of lost tooth/teeth in a private dental practice in Lagos, Nigeria.

Methods: A retrospective review of implant replacement of lost tooth/teeth over a period of 6 years at Schubbs Private Dental Clinic, Lagos, was carried out. Data analysis included age, sex, occupation, habits and medical condition of patients, augmentation procedure, technique of implant placement (immediate vs conventional loading) tooth/teeth replaced, and follow-up period.

Results: A total of 227 implants (Bicon, Boston, MA) with complete superstructure were placed in 121 patients (males = 68, females = 53; age

range: 15–74 years). Majority of the patients were of high socioeconomic class. Ten (8.3%) patients had immediate implants and 111 (91.7%) undergone 2-stage implant procedures. The highest number (39.2%) of implants was placed in the molar region, and the replacement of the canines was the lowest (3.1%). Success rate over a period of 6 years was 96%. Of the 9 (4%) implants that failed, 2 were repeated and remained functional till date.

Conclusions: Dental implant therapy as a means of tooth replacement is gaining popularity among Nigerian social upper class. Success rate in this series is comparable with previous reports from Europe and America. (Implant Dent 2010;19:65–72)

Key Words: implant restoration, partially, edentulous ridges, Nigerian patients, review

treatment and noninclusion of dental implantology in the dental curriculum.⁵ However, because of increasing health awareness in Nigeria; as a direct result of unlimited availability of health information on the worldwide web (internet), many more patients are demanding dental implant replacement for their missing tooth/teeth.⁶ Presently, facilities for dental implant replacement of missing tooth/teeth are currently available in a few private dental clinics located in urban centres across the country. We could not find any report in the literature on dental implant replacement of lost teeth from Nigeria.

Therefore, the aim of this study is to report the pattern and distribution of implant replacement of lost tooth/teeth in a Private Dental Practice in Lagos, Nigeria.

MATERIALS AND METHODS

A retrospective review of implant replacement of lost tooth/teeth over a period of 6 years (2000–2006) at Schubbs Private Dental Clinic, Lagos, was carried out. Data analysis included age and sex of patients, occupation, habits and medical condition of patients, augmentation procedure, tooth/teeth replaced, technique (imme-

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diate loading vs 2-stage surgery), and follow-up period.

Implant Restoration Protocol

The following set of protocol is strictly adhered to at Schubbs Private Dental Clinic, Lagos.

- Suitability of patients for dental implant restoration: general medical and dental history for identification of risk factors/high risk factors for implant failure. Systemic diseases are well controlled before commencement of implant therapy. Smokers are informed of the risk of implant failure; and the need to stop smoking at least a few weeks preoperatively and postoperatively.
- Quantitative and qualitative assessment of bone volume. Identification of patients who require bone augmentation before implant restoration.
- Selection of appropriate implant type (length and diameter).
- Surgical procedure under local anaesthesia for placement of implant fixture and healing cap (2-stage procedure). Immediate placement of the abutment in cases of immediate loading technique.
- Placement of superstructures.
- Follow-up: oral hygiene measures; assessment of implant-tissue margin and other outcome measures.

All the patients received Bicon dental implants (Bicon, Boston, MA).

Data Analysis

Data was analyzed using the SPSS for Windows (version 12.0; SPSS Inc, Chicago, IL) statistical software package; and presented in descriptive and tabular forms. Test of significance was used as appropriate, and *P* value was set at ≤ 0.05 .

RESULTS

A total of 227 dental implants (Bicon, Boston, MA) with complete superstructure were placed in 121 patients (males = 68, females = 53; age range: 15–74 years). There were 79 Nigerians and 42 whites. One hundred thirteen (93%) patients were nonsmokers, and

Table 1. Medical Condition of Patients

Medical Conditions	No. Patients	Sex*	
		M	F
No positive medical history	96	54	42
Hypertension	15	10	5
Gastric ulcer	3	2	1
Asthma	2	1	1
Hepatitis	1	1	0
Epilepsy	1	0	1
Radiation treatment	3	0	3
Total	121	68	53

**P* > 0.05.

M, male; F, female.

only 8 (7%; males = 7; females = 1) patients were smokers. Majority of the patients (79%) had no known medical condition; 25 patients (21%) reported various medical conditions (Table 1). Majority of the patients were of high socioeconomic class.

One hundred eleven patients (91.7%) undergone 2-stage implant procedure, and 10 (8.3%) patients had immediate loading of implants. The average time between implant insertion and placement of superstructure in those who had 2-stage implant procedure varied between 3 and 12 months. Of the 121 patients, 76 (62.8%) presented with sufficient alveolar bone width and height and required no bone augmentation, whereas 45 patients (37.2%) required alveolar bone augmentation before implant placement. Of the 45 patients who required augmentation, 39 patients (males = 30; females = 9) had bone augmentation with Bio-Oss and 6 patients (males = 4; females = 2) had sinus lift procedure with bone augmentation.

The highest number (39.2%) of implants was placed in the molar region and the replacement of the canines was the lowest (3.1%) (Table 2). Single-tooth replacement procedure was done 76 times (Table 3). Follow-up review ranged from 1 to 6 years. Two hundred eighteen (96%) of the implants osseointegrated fully and are still functional till date. Two of the fully osseointegrated implants had their crowns (superstructures) dislodged and had to recemented. Nine implants (4%) failed to osseointegrate and were removed. One of the 9 failed implants was recorded in a smoker. Of

Table 2. Tooth Type Replaced With Dental Implants

Tooth Type	No. Implants (%)
Upper incisors	41 (18.1)
Upper canines	6 (2.6)
Upper premolars	52 (22.9)
Upper molars	13 (5.7)
Lower incisors	19 (8.4)
Lower canines	1 (0.4)
Lower premolars	19 (8.4)
Lower molars	76 (33.5)
Total	227 (100)

Table 3. Number of Implants Inserted During Surgery

No. Implants per Surgical Session	Frequency	Total Number
1	76	76
2	46	92
3	10	30
4	6	24
5	1	5
Total	139*	227

*Some patients had different implant(s) inserted at different surgical session.

the 9 failed implants, 2 were repeated and remained functional till date. No difference in the success rate was found between immediate and conventional loading of implants.

DISCUSSION

The success of titanium dental implants in achieving osseointegration has been well documented clinically, radiographically, and histologically.^{7–12} The initial long-term retrospective studies of Branemark yielded the term osseointegration, and the concept that titanium root-form dental implants, osseointegrated into supporting bone, could be used to replace teeth in a patient who was fully edentulous.⁹ Predictable results have been reported when clinicians adhere to the recommended protocol for replacement and reconstruction.^{7–12}

Many factors play an integral and important role in the successful rehabilitation of fully and partially edentulous patients with osseointegrated implants. These include careful selection of appropriate patients with respect to systemic and local risk factors, the selection of appropriate implant shape, diameter

and length, and proper surgical procedure with regard to implant placement, wound closure techniques and healing period required in different clinical situations.¹⁰⁻¹³

Although, few of our patients had known systemic diseases; these seem not to affect the success of implant therapy, because our patients were carefully selected with regard to medical fitness; and the systemic diseases were well controlled before the commencement of implant therapy. Implant therapy has been successfully used in various medical conditions,¹⁴⁻¹⁷ including a patient who had recently undergone radiation therapy.¹⁸ Systemic conditions and habits have been reported to influence dental implant survival to varying degree.¹⁹ Illnesses that impair the normal healing cascade worsen the chances for surgical success. The mere presence of a disease, however, does not necessarily preclude implant therapy or affect significantly long-term outcomes.¹⁹ A recent review of the current evidence for the risks associated with endosseous dental implants in a range of systemic disorders shows that the degree of disease control may be far more important than the nature of the disorder itself.¹⁵ The benefits of implants to many of these patients may outweigh any risks.¹⁵

The single-tooth implant restoration was the most common procedure in the present series. Since the advent of dental implant therapy, it has become apparent that the dental implants has a role in the replacement of a single tooth,^{7,20} especially when it is desirable to avoid preparing adjacent teeth that have no caries, restorations or both, and to enhance aesthetics.⁷ Review of the literature has shown a similar percentage of success for single-tooth and multiple-teeth implant restorations.^{3,7,21} As the demand to use implants to replace the single missing tooth increased, so has the demand for a superior aesthetic outcome and immediate insertion and loading.^{7,22}

In this report, both techniques of immediate and conventional loading of implants were used. Historically, the recommended time between placement and functional loading of titanium dental implants has been 3

months for the mandible and 6 months for the maxilla.^{9,23} However, recent histologic and clinical studies investigating early and immediate loading support the concept and practice of earlier implant placement than was recommended previously.^{24,25} The average period of time between implant insertion and placement of superstructure in this study was 3 to 12 months; depending on age of patients, bone quality and quantity, oral hygiene and smoking habit, as well site (mandible vs maxilla).

In this study, the success rate of 96% was recorded. This is comparable with previous reports in the literature.²⁶⁻²⁸ Success rates of immediate and conventional loaded implants were similar in the present series. This alludes to the fact that immediate loading of dental implants is a highly successful procedure when the clinician exercises proper caution, with results rivaling those of the traditional 2-stage protocol.^{10,11,29} Successful immediate loading or early loading procedures in the mandible require attention to a number of factors, including hard tissue (e.g., predictable osseointegration, bone loss) and soft tissue (e.g., aesthetics, peri-implant health) concerns.³⁰ Adequate ridge size is an essential criterion for the clinical decision to load implants, immediately, along with other criteria, including implant location, implant coating, and implant length.³¹

It is noteworthy that one of the failed implants was recorded in a smoker. Cigarette smoking, although not necessarily a direct contraindication to endosseous implants, has been shown to impair wound healing after oral surgical procedures leading to increased incidences of implant failure.^{7,32} Given the well-documented deleterious effect of smoking on wound healing after tooth extraction and its association with poor quality bone and periodontal disease, a negative effect of tobacco use on implant success is to be expected.³³ Previous studies have established the fact that the failure rate of implants in smokers is more than twice that in nonsmokers.^{33,34} Therefore, extreme caution must be shown if the patient is not willing to refrain from smoking for at

least a few weeks preoperatively and postoperatively.³⁵

CONCLUSIONS

Dental implant therapy as a means of tooth replacement is gaining popularity among Nigerian social upper class. A success rate of 96%, comparable with previous reports in the literature, was achieved. The success rates of immediate and conventional loaded implants were similar in this study.

Disclosure

The authors claim to have no financial interest in any company or any of the products mentioned in this article.

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Abstract Translations

GERMAN / DEUTSCH

AUTOR(EN): Patricia A. Akeredolu, BDS, Wasilu L. Adeyemo, BDS, DMD, O. B. Omololu, BDS, O. Karunwi, BDS.
Implantwiederherstellung bei teilweise zahnlosen Leisten: Eine Überprüfung anhand von 121 Patienten aus Nigeria

ZUSAMMENFASSUNG: Zielsetzung: Aufgrund eines steigenden Gesundheitsbewusstseins fordern viele nigerianische Patienten, dass ihre ausgefallenen bzw. verlorenen Zähne durch Zahnimplantate ersetzt werden. Die vorliegende Studie berichtet über das Muster sowie die Verteilung bei Wiederherstellung mittels Implantaten für verlorene bzw. ausgefallene Zähne in einer Privatpraxis in Lagos, Nigeria.

Methoden: Eine retrospektive Prüfung der Wiederherstellungsbehandlung mittels Implantaten bei verlorenem Zahn/verlorenen Zähnen wurde über einen Zeitraum von 6 Jahren an der Schubbs Privatklinik für Zahnbehandlungen in Lagos durchgeführt. Die Datenanalyse umfasste Alter, Geschlecht,

Beruf, Gewohnheiten sowie die gesundheitliche Verfassung der Patienten, Anreicherungsverfahren, die zur Implantierung angewendete Methodik (unmittelbare gegenüber konventioneller Belastung), den ersetzten Zahn/ die ersetzten Zähne sowie ein Nachverfolgungszeitraum. **Ergebnisse:** Insgesamt 227 Implantate (Bicon, Boston, MA) mit einer kompletten Überstruktur wurden bei 121 Patienten eingepflanzt (M=68, F=53; Alter von 15 bis 74 Jahren). Die Mehrheit der Patienten stammte aus der sozial-wirtschaftlichen Oberschicht. 10 (8,3%) der Patienten wurden unmittelbar Implantate eingepflanzt und 111 (91,7%) unterzogen sich einer zweistufigen Implantierungsprozedur. Die meisten Implantate (39,2%) wurden im Molarbereich eingepflanzt. Am seltensten wurden die Eckzähne durch Implantate ersetzt (3,1%). Die Erfolgsquote über einen Zeitraum von 6 Jahren betrug 96%. Von den 9 (4%) Implantaten, die versagten, wurden 2 wiederholt eingesetzt und behielten ihre Funktionalität über den gesamten Beobachtungszeitraum. **Schlussfolgerungen:**

Die Behandlung mittels Zahnimplantaten zum Ersatz fehlender Zähne erfreut sich zunehmender Beliebtheit bei den sozial besser gestellten Nigerianern. Die in dieser Versuchsreihe festgestellte Erfolgsquote ist mit der früherer Berichte aus Europa und Amerika vergleichbar.

SCHLÜSSELWÖRTER: implantatwiederherstellung, teilweise zahnlose leisten

SPANISH / ESPAÑOL

AUTOR(ES): Patricia A. Akeredolu, BDS, Wasiu L. Adeyemo, BDS, DMD, O. B. Omololu, BDS, O. Karunwi, BDS. *La restauración con implantes de crestas parcialmente sin dientes: Una evaluación de 121 pacientes nigerianos*

ABSTRACTO: *Objetivo:* Debido al aumento en los conocimientos sobre la salud, muchos pacientes nigerianos demandan que se reemplacen sus dientes perdidos con implantes dentales. El estudio informa la pauta y distribución del reemplazo con implantes de dientes perdidos en una práctica dental privada en Lagos, Nigeria. *Métodos:* Se realizó una evaluación retrospectiva del reemplazo con implantes de dientes perdidos durante un período de 6 años en la Clínica Dental Privada Schubbs, Lagos. El análisis de los datos incluyó edad, sexo, ocupación hábitos y condición médica de los pacientes, procedimiento de aumento, técnica de colocación del implante (carga inmediata versus carga convencional), dientes reemplazados y período de seguimiento. *Resultados:* Se colocaron un total de 227 implantes (Bicon, Boston, MA) con superestructura completa en 121 pacientes (M = 68, F = 53; variación de la edad: 15 a 74 años). La mayoría de los pacientes pertenecían a la clase socioeconómica alta. Diez (8.3%) pacientes recibieron implantes inmediatos y 111 (91.7%) recibieron procedimientos de dos etapas. El número más alto (39.2%) de implantes se colocaron en la región de los molares y el reemplazo de los caninos fue el más bajo (3.1%). La tasa de éxito durante un período de 6 años fue del 96%. De los 9 (4%) implantes que fallaron, 2 se repitieron y mantienen la funcionalidad hasta la actualidad. *Conclusiones:* La terapia con implantes dentales como manera de reemplazar dientes perdidos gana popularidad entre la clase alta en Nigeria. La tasa de éxito de esta serie es comparable con informes anteriores de Europa y Estados Unidos.

PALABRAS CLAVES: 44 restauración 44 con implantes, crestas parcialmente sin dientes44

PORTUGUESE / ESPAÑOL

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Restauração de Implante de Rebordos Parcialmente Edêntulos: Revisão de 121 Pacientes Nigerianos

RESUMO: *Objetivo:* Devido à crescente consciência sobre saúde, muitos pacientes nigerianos estão exigindo que seu(s) dente(s) seja(m) substituído(s) por implantes dentários. O estudo relata o padrão e distribuição de substituição de implante de dente(s) perdido(s) numa clínica dentária particular em Lagos, Nigéria. *Métodos:* Foi realizada revisão retrospectiva de substituição de implante de dente(s) perdido(s) num período de 6 anos na Clínica Dentária Privada Schubbs, em Lagos. A análise de dados incluiu idade, sexo, ocupação, hábitos e condição médica dos pacientes, procedimento de aumento, técnica de colocação de implante (carga imediata vs convencional), dente(s) substituído(s) e período de acompanhamento. *Resultados:* Um total de 227 implantes (Bicon, Boston, MA) com superestrutura completa foram colocados em 121 pacientes (M = 68, F = 53; Faixa etária: 15–74 anos). A maioria dos pacientes era de alta classe socioeconômica. Dez (8.3%) pacientes tiveram implantes imediatos e 111 (91.7%) se submeteram a procedimentos de implante de 2 estágios. O número mais alto (39.2%) de implantes foi colocado na região molar e a substituição dos caninos foi a mais baixa (3.1%). A taxa de sucesso num período de 6 anos foi de 96%. Dos 9 (4%) implantes que falharam, 2 foram repetidos e permanecem funcionais até hoje. *Conclusões:* A terapia de implante dentário como meio de substituição de dentes está ganhando popularidade entre a alta classe social nigeriana. A taxa de sucesso nesta série é comparável com relatórios anteriores da Europa e América.

PALAVRAS-CHAVE: r restauração de implante, rebordos parcialmente edêntulos

RUSSIAN / РУССКИЙ

АВТОРЫ: Patricia A. Akeredolu, бакалавр хирургической стоматологии, Wasiu L. Adeyemo, бакалавр хирургической стоматологии, доктор стоматологии, O. B. Omololu, бакалавр хирургической стоматологии, O. Karunwi, бакалавр хирургической стоматологии *Восстановление частично адентичных альвеолярных гребней с помощью имплантатов: Анализ данных по 121 пациенту из Нигерии*

РЕЗЮМЕ. *Цель.* Вследствие растущей осведомленности в вопросах здравоохранения, многие пациенты в Нигерии обращаются с просьбой восстановить утраченные один или несколько зубов зубными имплантатами. В данном исследовании представлены конфигурация и локализация имплантатов, замещающих утраченные один или несколько зубов у пациентов частной клиники в г. Лагос, Нигерия. *Методы.* Выполнен ретроспективный анализ восстановления утраченных одного или

нескольких зубов имплантатами за 6-летний период в частной стоматологической клинике Schubbs Private Dental Clinic, г. Лагос. Анализировались возраст, пол, род деятельности, привычки и состояние здоровья пациентов, процедура наращивания кости, методика установки имплантатов (немедленное нагружение в сравнении с традиционным нагружением), зуб или зубы, подлежащие восстановлению, а также период последующего наблюдения.

Результаты. Всего было установлено 227 имплантатов (Bicon, Boston, MA) с полной супраструктурой у 121 пациента (М=68, Ж=53; возрастной диапазон: от 15 до 74 лет). Большая часть пациентов принадлежали к высшему социально-экономическому слою общества. Десяти (8,3%) пациентам была произведена немедленная имплантация и 111 (91,7%) пациентам была произведена двухэтапная имплантация. Наибольшее количество (39,2%) имплантатов было установлено в области моляров, а наименьшее – в области клыков (3,1%). Процент успешных имплантаций за шестилетний период составил 96%. Из 9 (4%) неприжившихся имплантатов 2 были установлены повторно и сохраняют функциональность до настоящего момента.

Выводы. Лечение с помощью зубных имплантатов как средство восстановления зубов завоевывает все большую популярность среди высших социальных слоев Нигерии. Процент успешных имплантаций в этой серии сопоставим с данными, ранее полученными из Европы и Америки.

КЛЮЧЕВЫЕ СЛОВА: Восстановление с помощью имплантатов, частично адентичные гребни

TURKISH / TÜRKÇE

YAZARLAR: Patricia A. Akeredolu, BDS, Wasio L. Adeyemo, BDS, DMD, O. B. Omololu, BDS, O. Karunwi, BDS.
Kısmen Dişsiz Diş Sirtında İmplant Restorasyonu: 121 Nijeryalı Hastanın İncelenmesi

ÖZET: **Amaç:** Sağlık konusunda artan bilinçlenmenin bir sonucu olarak pek çok Nijeryalı hasta kaybettikleri dişlerin yerine dental implant yerleştirilmesini arzulamaktadır. Bu çalışma, Lagos, Nijerya'da özel bir dental klinikte yapılan implant yerleştirme prosedürlerinin örüntü ve dağılımını incelemektedir. **Yöntemler:** Lagos'ta Schubbs Özel Dental Kliniğinde 6 yıllık bir süre boyunca kaybedilen dişin/dişlerin yerine yerleştirilen implantların retrospektif bir incelemesi yapıldı. Hastaların yaşı, cinsiyeti, mesleği, alışkanlıkları ve medikal durumu ile birlikte ogmantasyon prosedürü, implant yerleştirme prosedürünün türü (hemen veya konvansiyonel yükleme), yerleştirilen diş/dişler ve takip süresi gibi faktörler veri analizine dahil edildi. **Bulgular:** 121 hastada (E: 68, K: 53, Yaş aralığı: 15–74 yıl) tam süperyapılı toplam 227 implant (Bicon, Boston, MA) yerleştirildi. Hastaların çoğu daha üst bir sosyoekonomik kesimden idi. On (8.3%) hastada hemen yükleme ve 111 (91.7%) hastada ise 2-aşamalı implant tekniği kullanıldı. Yerleştirilen implantların büyük çoğunluğu (39.2%) molar bölgede iken, en az yerleştirme yeri kanin bölgeydi (3.1%). Altı yıllık süre içinde başarı oranı %96 idi. Başarısız olan 9 (4%) implantın iki tanesi tekrarlandı ve bu yazı tarihine kadar bunlar fonksiyonel idi. **Sonuçlar:** Nijerya'nın üst sosyal kesiminde diş replasmanında dental implant terapisi popülerlik kazanmaktadır. Çalışılan bu serinin başarı oranı, bundan önce Avrupa ve Amerika'daki literatürde bildirilen orana benzerdir.

ANAHTAR KELİMELE: implant restorasyonu, kısmen dişsiz diş sırtı

JAPANESE / 日本語

部分欠損歯列顎堤におけるインプラント再生術:ナイジェリア人患者121名の評価

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研究概要:

目的: 健康に対する意識が高まるに従い、多くのナイジェリア人が欠損歯列部位のデンタルインプラント再生を強く要望している。当研究はナイジェリアのラゴス (Lagos) で開業するプライベートデンタルオフィスでおこなった欠損歯列インプラント再生に関するパターンと流通について報告する。

方法: ラゴスで開業するSchubbs プライベートデンタルクリニックで6年間にわたって欠損歯列部位インプラント再生に関する回顧的調査を行った。データ分析には患者の年齢をはじめ性別や職業また習慣の他に健康状態、そして増大術処置や欠損歯列部位のインプラント再生技術 (即時法または従来法) また再生した歯とフォローアップ期間をすべて包括して扱った。

結果: コンプリート上部構造物を付属した総数227本のインプラント (Bicon社, マサチューセッツ州ボストン) を121名の患者 (男性68名、女性53名; 年齢範囲: 15歳から74歳) に埋入した。患者の過半数は社会経済的に高い階層に属している。10名 (8.3%) の患者は即時インプラント施術を受け、残る111名 (91.7%) は2ステージインプラント処置を受けた。最多数のインプラント (39.2%) が臼歯部位に埋入されたのに対し、犬歯部位修復用インプラント数は最少 (3.1%) となっている。6年間にわたる成功率は96%で、失敗した9本 (4%) のうち2本は再修復され現時点でも依然機能している。

結論: 欠損歯列修復をめざすデンタルインプラント治療は、ナイジェリア社会で高い地位を占める階層で人気が高まって来ている。このシリーズにおける成功率は欧米で既に発表された多数の報告にも匹敵するものである。

キーワード: インプラント再生、部分欠損歯列顎堤

CHINESE / 中国語

部分無歯牙脊的植體修復: 121名奈及利亞患者檢討

作者: Patricia A. Akeredolu, BDS, Wasiu L. Adeyemo, BDS, DMD, O. B. Omololu, BDS, O. Karunwi, BDS

摘要:

目的: 由於健康意識提高, 奈及利亞許多患者開始要求以牙科植體替換掉牙。本研究提出奈及利亞拉哥斯一家私人牙科以植體替換掉牙的模式與分布報告。

方法: 針對拉哥斯 Schubbs 私人牙科診所在 6 年期間以植體替換掉牙的記錄進行回顧性檢討。資料分析包括患者的年齡、性別、職業、習慣與醫療病況、增高術、替換牙齒的植體置入技術 (立即載入與傳統載入) 以及追蹤期間。

結果: 121 名患者 (男性 68 名, 女性 53 名; 年齡範圍: 15 - 74 歲) 合計在上層置入 227 顆植體 (美國麻州波士頓 Bicon)。大多數患者都屬於高社會經濟階級。10 名患者 (8.3%) 有立即載入植體, 111 名患者 (91.7%) 進行兩階段植體手術。最多植體置於臼齒區 (39.2%), 犬齒替換則最少 (3.1%)。6 年期間的成功率為 96%。失敗的 9 顆植體 (4%) 中有 2 顆重複植入且截至當時仍在使用中。

結論: 以牙科植體替換牙齒在奈及利亞較高社會階層中已經開始普及。此系列的成功率和先前的歐美報告類似。

關鍵字: 植體修復、部分無齒牙脊。

KOREAN / 한국어**부분 무치악용기의 임플란트 수복: 나이지리아 환자 121명에 대한 검토**

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초록:

목적: 건강에 대한 관심이 증대되어감에 따라, 많은 나이지리아 환자들이, 결손 치아를 임플란트로 대체하고자 희망한다. 본 연구에서는 나이지리아 라고스(Lagos)에 위치한 개인 치과의원에서의 결손 치아에 대한 임플란트 식립 패턴과 그 분포를 보고하고자 한다.

방법: 라고스 Schubbs Private Dental Clinic에서 6년 동안 결손 치아부위에 식립한 임플란트에 대해 후향적 검토를 시행하였다. 데이터 분석에는 환자의 연령, 성별, 직업, 습관 및 질환 상태, 증대술 시술, 치아 대체 임플란트 식립 기법(즉시 식립 혹은 전통적 식립) 및 추적관찰기간이 포함되었다.

결과: 121명의 환자(M=68, F=53; 연령범위: 15-74 세)에게 총 227개의 임플란트(Bicon, Boston, MA)를 완전상부구조(complete superstructure)와 함께 식립하였다. 환자들 대부분은 사회경제적으로 상위계층에 속했다. 10명의 환자(8.3%)들은 즉시 식립 임플란트를 시술 받았고, 111명(91.7%)은 2-단계 임플란트 시술을 받았다. 가장 많은 수의 임플란트(39.2%)가 대구치 부위에 식립되었고 견치부위 대체 경우가 가장 적었다(3.0%). 6년에 걸친 성공률은 96%였다. 실패했던 9개의 임플란트(4%) 중, 2개는 재식립되어 현재까지 기능을 유지하고 있다.

결론: 치아대체 수단으로서의 치과 임플란트 요법은 나이지리아의 사회적 상류계층에서 인기를 얻어가고 있다. 이번 사례의 성공률은 유럽 및 아메리카에서 이전에 보고된 결과와 필적할만한 것이다.

키워드: 임플란트 수복, 부분 무치악 능선