



المديريــــة العامـــة للمؤسســات الصحيــة الخاصــة Directorate General of Private Health Establishments

# USE OF LASER IN DENTAL PRACTICE

**DENTAL TEAM** 



<b>Document Title</b>	Policy on the Privilege of Using LASER in Dental Practice			
<b>Document Type</b>	Policy			
Directorate/Instit ution	Directorate General of Private Health Establishments			
Target Group	ALL licensed General Dentists and Dental Specialists/Consultant providing laser dental services in the Sultanate Of Oman licensed health facilities.			
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#### Acknowledgment

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# Acronyms

CPD	Continuous Professional Development
DGPHE	Directorate General of Private Health Establishments
FDA	Food and Drug Administration (USA)
LASER	Light Amplification by the Stimulated Emission of Radiation
МоН	Ministry of Health
TMJ	Temporomandibular Joint

#### **Intent Statement**

Privileging of LASER ensures rational and effective use of LASER in dental practice. This is achieved by regulating the provision of LASER procedures by licensed dentists and dental specialists in health care facilities offering dental LASER services in their clinical practice.

The policy of privileging also ensures the safety of health care professionals and patients during provision of LASER dental service.

#### **Definitions**

The Facility	The eligible health care facility
The Committee	Dental committee assigned by the DGPHE

#### Introduction

Clinical privileging for dentist is the process of providing a licensed dental practitioner (general or specialist) the permission to carry out <u>specific duties</u> or <u>procedure</u> as per health care <u>facility</u> scope of practice. This involves the review of qualifications, training, competence, and experience as well as the minimal requirements to perform such duties or procedure in the facility.

Any additional clinical privilege is only given in considerations of the clinical needs, resources and capacity of the services provided within the health facility to ensure the delivery of safe and high-quality dental services.

#### **Policy statement**

DGPHE assesses and approves submitted applications for additional dental (clinical) privileges for licensed dentists/dental specialists to perform the specified procedure in eligible private health care facility using a well-structured process, based on a well-defined criteria and standards.

# **Policy Implementation**

Professional Titles	Dentists or dental specialists granted additional clinical privileges should adhere to titles mentioned in original license.
Validity terms	Clinical privilege is granted for a maximum of two years and renewed with practice license. Specific terms and conditions for renewal apply.
Renewals	Granted privileges must be supported by international standards and best practices. Each renewal must involve the review of clinical competence, malpractice, incident reporting and patient outcomes. Renewals must also be supported by evidence of maintaining minimal CPDs.

#### **Target Audience**

The policy is designed to establish and enforce minimum requirements for licensed dentists and dental specialists to use lasers in their clinical practice. It aims to ensure provision of the highest level of safety and quality of LASER applications at all times.

#### **Responsibilities of Actors:**

#### Background

LASER technology involves using the amplified electromagnetic radiation in the wavelength range from 810 nm to 1 mm primarily by the process of controlled stimulated emission. It is used in a number of medical applications, including dentistry.

In dentistry, LASER is used in soft and hard tissues. The soft tissue applications of LASER provide Better outcomes in terms of dry and bloodless surgery field, minimal post-operative swelling, faster post-operative healing and scarring and minimal post-operative pain. In case of hard tissues, LASER is sometimes used for applications including diagnosis of caries, cavity preparation, enamel etching, polymerization of composite resin and sterilization of root canals. FDA has approved certain dental procedures.

#### **Types of dental LASERS**

Centre for Devices and Radiological Health (CDRH) of FDA's Code of Federal Regulation (CFR) has categorised laser devices into 4 classes:

- 1- Diodes
- 2- Neodymium- Doped Yttrium Aluminum Garnet (ND: YAG),
- 3- Erbium Yttrium Aluminum Garnet (Er: YAG)
- 4- CO2

All of these are Class IV LASERS (meaning they are high powered and can be hazardous to the eyes).

#### **Dental LASER applications**

There are major applications for use of LASER in dentistry. Each application must be assessed for privilege and permission granted individually.

- 1- Gingivectomy/crown lengthening
- 2- Gingivoplasty
- 3- Gingival depigmentation
- 4- Soft tissue and periodontal surgery

- 5- Removal of oral lesions\*\*
- 6- Root canal treatment
- 7- Bone surgery
- 8- Implant-related procedures (must have implant privilege at the same time)

\*\* N.B. Precaution must be taken when using LASER for biopsy/histology purpose. Direct LASER will irreversibly change the specimen and affect histopathological examination, discussion with specialist is advised

#### **Policy Monitoring**

	- Primary Dental Degree (BDS/BDSc), and					
	- Specialist qualification of relevant field (assessed and approved					
Minimum LASER	individually)					
provider	OR					
requirements for	- Primary Dental Degree (BDS/BDSc), and					
application	- Evidence of minimum training specified below, and					
	- Evidence of performed cases for each LASER application as specified					
	<u>below</u>					
	-The clinic where the LASER is used should have:					
	-The entrance of LASER clinic is clearly marked with warning sign(s)					
Dental practice	whenever LASER is in use					
Requirements	-A high intensity and non-reflecting light					
	-Good ventilation either using air exhaust or window(s)					
	All dental LASER equipment must be approved for use in dental practice					
	use by at least one of the recognised organisations (or equivalent) to					
Equipment	establish that the equipment fulfils all the essential safety and					
Requirements	environmental requirements, e.g., Food and Drug Administration (FDA),					
	Conformité Européenne (CE) etc.					

	In all cases, for approval, there must be a Local Dealer available for		
	specific equipment installation and maintenance support.		
	- The Applicant should undertake at least 10 accumulative CPD		
	verifiable credits of theoretical training and perform 2 clinical cases		
	under accredited training (for each application)		
	- Competent personnel from the LASER company should provide		
Training	training for the dentist/dental specialist to train them how operate the		
g	specific LASER equipment and to learn about specific safety aspects of		
	the equipment. This training should be certified, and evidence provided		
	to the Concerned Dental Committee.		
	Dentist should not practice beyond their scope of license		
	-Specific equipment purchase, maintenance contract and		
В <i>И</i> ::1	inspection/maintenance entries		
Minimal record	-Full clinical notes and logbook of all treated cases		
keeping (for	-Informed consent of all treated cases		
renewal inspections)	-Reporting of any incidents or adverse effects		
•	-Relevant CPD records		
	General dentists or dental specialists are prohibited from practicing		
	beyond their scope of their license. For treatments outside of the		
	scope of practice, the patient should be referred accordingly.		
	Examples of scenarios that lead to revoking clinical privileges:		
Withdrawal of clinical	-Falsified or inaccurate documentation		
privileges	-Malpractice leading to suspension of license		
	-Reporting of ethical concerns or patient complaints		
	-Resignation or transfer of staff		
	-Termination of license		
	To maintain the granted clinical privilege, all general dentists or dental		
CPD	specialists should receive recognized ongoing CPD training related to a		
	specific clinical privilege.		
	<u>I</u>		

Safety precautions  LASER service is provided. If not, ensure that reflective/metallicum surfaces or mirrors are covered when providing LASER treatment.  Windows should be kept closed and all plastic curtains used should be made of non-reflecting materials.  Materials used in clinic should be flame-resistant.  Protective eyewear should be worn during treatment session, and all other safety measures should be followed.  Considerations to keep in mind:  Surfaces can absorb LASER energy. This can cause rise in surfact temperature and ignite the material.  Never use the LASER around explosive materials.  Never use flammable substances in LASER room (e.g. gases for anaesthesia, material for treatment or cleaning and disinfecting the instruments and surfaces)  If solvents and flammable liquids are used to clean and disinfect, make sure that they evaporate before working with the LASER.  Never use oxidation gases such as dinitrogen oxide (N2O) and oxygen.  Be particularly careful when using oxygen.  If flammable materials are necessary for treatment, wet them.  Keep a fire extinguisher and water in the treatment room.				
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#### **Appendix 1: Application form:**

#### APPLICATION FOR ADDITIONAL CLINICAL PRIVILEGE (DENTAL)

#### INSTRUCTIONS FOR THE APPLICANT

- This form should be completed by the applicant.
- Policy of the clinical privilege you are applying for must be read and understood and necessary requirements fulfilled prior to submitting this application.
- Requirements for renewals (including CPD, case record keeping, and specific maintenance records) must be provided before submitting renewal application (All specified in the specific clinical privilege policy).
- Clinical privileging involves prior arrangement with the health care facility where the health care service or procedure is going to be provided.
- You must submit a separate application for each healthcare facility you intend to perform the specified clinical privilege.
- Each granted clinical privileges has an expiry date, please make the necessary arrangements to renew before expiry.
- This application is handled by the Specific Clinical Privileging Subcommittee for further action (approval, interview, renewals inspection etc.)
- Some clinical privileges require an interview with operator, you will be notified if you are required to appear for the interview.
- Some clinical privileges require inspection of the healthcare facility. The facility manager will be notified if this is required.
- General dentists or dental specialists are prohibited from practicing beyond their scope of their license. For treatments outside of the scope of practice, the patient should be referred accordingly.
- Misconduct may lead to revoking of clinical privilege at any time, this include submitted falsified or inaccurate documentation, reports of ethical concerns or filed complaints (details in specific clinical privilege policy)
- Granted clinical privilege does not entitle the dental practitioner for any additional titles. (i.e. use of titles such as Laser specialist, implantologist, cosmetic dentists etc. is not allowed).
- Changing place of work and the health care establishments requires submitting new application for review and approval.
- All declarations must be signed to process this application.



☐ New Application*	☐ Renewal**	☐ Modify existing**	
Applicant Name			
Name of Clinical Privilege	USE OF LA	ASER FOR DENTAL PROCEDURES	
Date of application			
License to practice number and date of expiry		Expiry date	
Name of Health Establishment			
Basic Dental Qualification (Name, Institution and Year)			
Specialist Dental Qualifications (Name, Institution and Year)			
Courses attended			

<sup>\*\*</sup>Renewal and modification forms must include: CPD evidence, case logbook, specific equipment maintenance record (refer to policy)

LASER applications	Select the requested items (attach	Decision of the privileging subcommittee	
	training evidence)	Granted	Denied
Gingivectomy/Crown Lengthening			
2. Gingivoplasty			
Gingival Depigmentation			
Soft Tissue and Periodontal Surgery			
5. Removal of Oral Lesions			
Root Canal Treatment			
7. Bone Surgery			
Implant-related procedures			
9. Others (Specify)			

<sup>\*</sup>New applications must include copies of qualifications, attendance certificates evidence of performed cases, and CV of applicant

# **DECALARATIONS** ☐ I declare that the above information is correct, and all attached documents are authentic (including copies), and accurate. I declare that the health care establishment that I will practice in has the suitable resources at the time of performing the procedure. ☐ I fully understand that this privilege is only valid for the selected and approved procedures, and only applicable to use in the specified healthcare establishment. ☐ I understand that this privilege has an expiry, and it must be renewed with the practice license. ☐ I understand that I must submit a new application if place of work has been changed or if I wish to apply for the same privilege in another location. ☐ I declare that to my knowledge, there are <u>no complaints or warnings</u> have been filed or issued against me. Name of Applicant: \_\_\_\_\_\_ Signature \_\_\_\_\_ Name of Health Establishment: \_\_\_\_\_\_ Seal & Signature: \_\_\_\_\_ Address of Health Establishment: \_\_\_\_\_\_ Date: FOR OFFCICIAL USE

Documents complete: Yes □	No □	
Interview needed: Yes □	No □	Date of Interview (if needed):
Decision of Clinical Privilege (Dental) Subco		ommittee: Approved ☐ Not Approved ☐
Date:		

Names of and signature of subcommittee members:

	Name	Signature
1-		
2-		
3-		

#### المديرية العامة للمؤسسات الصحية الخاصة Directorate General of Private Health Establishments

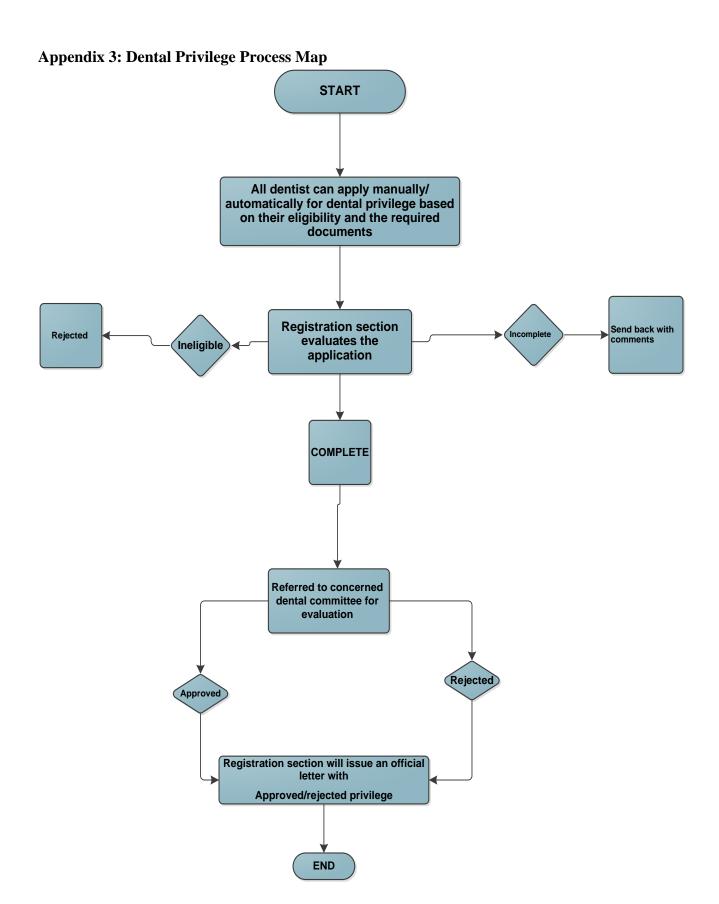


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Appendix 2: Consent Form Example					
Example of patient consent for use of LASER for dental treatment (Must be retained in records)					
ة ضمن ملف المريض)	• • • • • • • • • • • • • • • • • • • •				
Clinic name:	اسم العيادة:				
Patient Consent	موافقة على خطة علاج				
Full name:	اسم المريض:				
Date of birth:	تاريخ الميلاد:				
Address:	العنوان: رقم الهاتف:				
Contact number: File number:	رقم الهائف: رقم الملف :				
rne number:	رقم الملك				
I confirm that details of intended LASER procedure have been explained to me by the treating dentist.  The following have been discussed:  Goal of treatment by LASER  Alternatives to using LASER  Reasons for using LASER over other methods  Risks associated with using LASER  Need for repeated treatment to achieve optimal results.  Generally, LASER is a controlled and safe procedure, but complications may happen. These include burns, eye damage redness, swelling, bleeding, colour variation, scarring, post-operative pain and rarely infections.  The dentist will be taking all measures to prevent or reduce these complications by periodically inspecting the LASER machine using eye-protective glasses for all people inside the dental clinic and receiving the necessary training continuously,	أؤكد أن الطبيب المعالج قام بشرح كافة التفاصيل المتعلقة باستخدام تقنية الليزر في علاجات الفم والأسنان. وقد تم شرح التفاصيل المتعلقة بالتالي:  - الهدف من استخدام الليزر في حالتي عوضا عن الليزر المتوفرة لعلاج حالتي عوضا عن الليزر المصاحبة لاستخدام الليزر المصاحبة لاستخدام الليزر الحصول على النتيجة الأفضل الحاجة لإعادة استخدام الليزر تقنية آمنة لكن بعض المضاعفات المحتملة قد تحدث، على سبيل المثال: الحروق، ضرر بالعين، الورم، النزيف، تغير لون اللثة والأغشية، تليف الجرح، ألم بعد العملية، وحدوث عدوى أو التهابات. لذلك يقوم الطبيب المعالج باتخاذ كافة الإجراءات لمنع حدوث أو لنقليل من هذه المضاعفات عن طريق فحص جهاز الليزر بشكل دوري، استخدام النظارات الواقية للعين لجميع الأشخاص المتواجدين، بالإضافة لتاقي التدريب المناسب بشكل متواصل.				
- I understand that dental LASER has its risks, benefits, and alternatives. I have been briefed about details of each, and therefore, give consent to having the dental LASER procedure by the dentist signing	-بناءا على ما سبق وما تم شرحه لي، فإنني أثبت أنني قد فهمت أن تقنية الليزر لها مضاعفات، واستخدامات مفيدة وخيارات بديلة، وقدم تم شرح التفاصيل عن طريق الطبيب المعالج، لذلك فإنني أوافق				
this consent.	على تلقي علاج بالليزر بواسطة الطبيب الموقع أدناه.				
Patient name (print):	· · · · · · · · · · · · · · · · · · ·				
Patient/parent signature:	<u> </u>				
Date:	<del></del> <del></del>				
I have been offered a copy of this consent form	لم نرويدي بنسخه من هذه المواقفة				
Dentist name and signature:	الله وتوقيع الطبيب المعالج:				

Witness signature date:

توقيع الشاهد والتاريخ:



# سياسة الامتيازات السريرية في طب الأسنان Scope of work and clinical privileges in dental practice Policy

### المبادىء العامة:

#### تستند هذه السياسة إلى المبادئ العامة التالية:

- يتحمل المالك / المدير الطبي /المدير الإداري للمؤسسة الصحية لطب الأسنان مسؤولية ضمان الكفاءة وتيسير أداء جميع أطباء الأسنان الممارسين داخل المؤسسة، لذلك يجب أن يكون لجميع أطباء الأسنان امتيازاتهم السريرية المحددة عند التعيين وفي وقت تجديد التراخيص، كما يجب مراجعة الامتيازات الممنوحة كجزء من إجراءات التدقيق الداخلي ومراجعة الأداء.
- يجب أن تتم مر اجعة امتيازات جميع الممارسين الصحيين كل سنتين عند تجديد ترخيص الطبيب طوال فترة التوظيف داخل المؤسسة.
- يجب التأكد من أن المؤسسة الصحية الخاصة مجهزة بالكامل قبل تحديد الامتيازات السريرية المسموح بها.
- يتم إجراء تقييم الامتيازات السريرية من قبل فرق خاصة تابعة للمديرية العامة للمؤسسات الصحية الخاصة.
- يمكن للجهة المختصة مراجعة الامتيازات السريرية في أي وقت بناءاً على طلب اللجنة المختصة بطب الأسنان والامتيازات السريرية أو بناء على وقوع بلاغ أو مخالفة.

# لدعم تنفيذ المبادي المذكورة أعلاه، يجب ضمان تطبيق الإجراءات التالية:

• يجب على المالك / المدير الطبي /المدير الإداري للمؤسسة الصحية المقدمة لخدمة طب الأسنان الاحتفاظ بسجل لجميع المعلومات المتعلقة بنتائج عملية التعيين بما في ذلك استمارة تحديد الامتيازات السريرية الممنوحة.

• يجب على المالك / المدير الطبي /المدير الإداري للمؤسسة الصحية لطب الأسنان اجبراء تقييم دوري منتظم لأداء الممارسين لرصد الأداء والتقدم في المهارات والكفاءات ولضمان التعرف المبكر على الإشكاليات التي قد تضر بنوعية الرعاية، حيث يجب على المؤسسة الصحية المقدمة لخدمة طب الأسنان اعتماد استراتيجيات لمعالجة مثل هذه الأمور.

## المؤسسة الصحية

# دور المؤسسة الصحية المقدمة لخدمة طب الأسنان:

- يجب على المالك / المدير الطبي /المدير الإداري للمؤسسة الصحية المقدمة لخدمة طب الأسنان التأكد من تعيين الأطباء وفقاً لاحتياجات المؤسسة ومواردها المتاحة بحيث يضمن وجود إجراءات مناسبة لتحديد عدد ونطاق هذه التعيينات.
- يعتبر المالك / المدير الطبي /المدير الإداري للمؤسسة الصحية لطب الأسنان مسؤولاً عن اتخاد القرار النهائي بشأن ما إذا كان سيتم تعيين طبيب أسنان بامتيازات طب الأسنان المعتمدة أم لا، كما يحتفظ المالك / المدير الطبي /المدير الإداري للمؤسسة الصحية المقدمة لخدمة طب الأسنان بالمسؤولية عن عواقب تعيين الأطباء والمتخصصين في فريق العمل كجزء من المسؤولية الشاملة.
- يجب تسجيل وحفظ جميع الموافقات الصادرة عن المديرية للامتيازات السريرية في ملف الطبيب.
- يتحمل المالك / المدير الطبي /المدير الإداري للمؤسسة الصحية المقدمة لخدمة طب الأسنان مسؤولية ضمان تحديث المستندات والتأكد من أن كل طبيب على درايه كافيه بمسؤولياته وامتيازاته المحددة.
- يجب أن يضمن المالك / المدير الطبي /المدير الإداري للمؤسسة الصحية المقدمة لخدمة طب الأسنان الالتزام بعملية تعيين الممارسين الصحيين، واتباع السياسات والمبادىء التوجيهية وامتثال الممارسين الصحيين لهذه السياسات.

# **General principles:**

This policy is based on the following general principles:

- The owner/medical director/administrative director of the dental health establishment is responsible for ensuring the efficiency and facilitating the performance of all practicing dentists within the establishment. Therefore, all dentists must have their clinical privileges specified at the time of employment and renewals and part of the performance review process.
- The privileges of all dental practitioners must be reviewed every two years upon renewal of a dental practice license throughout the term of employment.
- Clinical Privileges Assessments should be conducted by Dental privileges Committee.
- It must be ensured that the private health establishment is fully equipped before determining the permissible clinical privileges for dental practitioners.
- Clinical privileges can be reviewed at any time based on the request of the Dental Team or upon notification of incidence report or violation.

# To support the implementation of the above-mentioned principles, there is a need to ensure the effectiveness of the following measures:

- The owner / medical director / administrative director of the dental health establishment is required to keep a record of all documentation related to the results of the employment process, including the approved clinical privileges.
- The owner / medical director / administrative director of the dental health establishment should conduct a regular review of the performance of practitioners to evaluate improvement in performance and progress in skills and competencies and to ensure early identification of matters that may affect the quality of care, and the dental health institution must adopt strategies to address such matters.

#### **Dental health establishment**

The role of the dental health establishment:

- Every owner / medical director / administrative director of the dental health establishment must ensure that dentists are recruited in accordance with the needs of the health establishment and its available resources so they can ensures that there are appropriate procedures for determining the number and scope of these recruitments.
- Owner/medical director /administrative director of the dental health establishment is responsible for making the final decision on whether to recruit a dentist with approved additional dental clinical privileges. The

owner/medical director/administrative director of the dental health establishment also retains responsibility for the consequences of recruiting general dentists and specialists to the work team as part of the overall responsibility.

- All approved clinical privileges must be recorded and kept in staff file.
- Owner/medical director/administrative director of the dental health establishment is responsible for ensuring that the documents are up-to-date and that each dentist is sufficiently familiar with his specific responsibilities and privileges.
- The owner/medical director/administrative director of the dental health establishment must ensure that the recruitment process is adhered to, that the policies and guidelines are followed, and that dental practitioner comply with these policies.