



PROLOTHERAPY CERTIFICATION TRAINING PROGRAM

STANDARDS FOR PROLOTHERAPY CERTIFICATION TRAINING PROGRAM

1. NAME OF TRAINING

Prolotherapy Certification Training Program

2. AIM OF TRAINING

The prolotherapy certification training program aims at training and authorizing physicians who will practice prolotherapy for human health in the health system when necessary.

3. LEGAL BASIS FOR TRAINING

The following legislation is taken as a basis for the implementation of this training program.

1. Regulation on Certification Training of the Ministry of Health published in the Official Gazette dated February 4, 2014 and numbered 28903.
2. Regulation on Private Health Institutions Practicing Acupuncture Treatment and Practice of This Treatment
3. Regulation on Traditional and Complementary Medicine Practices published in the Official Gazette dated October 27, 2014 and numbered 29158.

4. DEFINITIONS

Prolotherapy: It is a method of treatment which is based on injecting proliferative and irritant solutions in cases of loco motor system injuries and joint laxity.

Practice Center: It is a center which is established within the body of health application and research center of the faculties of medicine and training and research hospitals to perform the prac-

tices specified in this Regulation under the responsibility of a physician who holds a certificate on the relevant field and which can provide training if authorized by the Ministry.

Distance Learning: It is a way of learning in which students are separated by time and physical location from instructors and both the transfer of course contents and the interaction are ensured using information and communication technologies.

Asynchronous Learning: It is a way of learning-training which occurs asynchronously at different times and locations.

Synchronous Learning: It is a way of learning-training which occurs synchronously.

5. PROCEDURES AND PRINCIPLES TO IMPLEMENT THIS TRAINING PROGRAM

The training program shall be implemented based on the procedures and principles listed below.

1. The training program shall be carried out both in theory and in practice. The theoretical part of the training may be face-to-face and/or at a maximum of 80% distant learning.
2. It shall be ensured, in distance learning, that the participants have synchronous (at least 50%) and asynchronous access to interactive practices on-line through the infrastructure provided by the server and that interactive live courses are taught at certain hours in a certain

place/hall within the bounds of live curriculum.

3. The participants need to undertake and follow up the treatment of at least 10 (ten) cases during the training.
4. The contents of the courses shall be designated in the beginning of the training program; the trainees shall be given references or provided with lecture notes.
5. Theoretical and practical courses shall last for 8 (eight) hours a day at most. The period of a course shall be 40 (forty) minutes.
6. A maximum of 50 (fifty) participants can be accepted for distant training sessions and a maximum of 25 (twenty five) participants can be accepted for face-to-face sessions in one training period/term except for 2 (two) participants who will be assigned by the Ministry.
7. The participant to be assigned by the Ministry will be a Physician who does not have any Public Service Liability and whose training in this program is of importance for his/her services in the institution she/he works. This participant will not pay any training fee. The participants cannot be made work in any other field/unit/center or in any other job position during the training program.
8. Continuous attendance is essential for the training, and the practical training requires compulsory attendance. The participants who cannot attend 10% of the practical training at most due to a legal excuse shall not be allowed to take the certification exam unless they complete the hours they miss. A maximum of 10%

absence can be accepted for the theoretical training due to a legal excuse.

9. The following teaching and learning strategies, methods and techniques shall be applied in the training program:
 - Verbal lecture method
 - Video-based teaching method
 - Small group discussion
 - Demonstrative teaching
 - Question and answer method
 - Simulation method
 - Clinical practice
 - Practice on dummy
10. Practical training is performed in application centers or units on an individual basis or as groups, prolotherapy practices consist of monitoring, performance under observation and self-reliant performance phases.
11. The relevant unit of this certified training program is Traditional and Complimentary Medicine Application Directorate, General Directorate of Health Services, Ministry of Health.

6. PARTICIPANTS AND THEIR QUALIFICATIONS

A physician may participate in this certified training program.

7. TRAINING CURRICULUM

7.2. Learning Objectives and Subjects in Training Courses

The subjects and learning objectives to be included in the theoretical part of the training courses are stated in Table 1. The subjects and learning objectives to be included in the practical part of the training courses are stated in Table 2.

Table 1: The subjects and learning objectives to be included in the theoretical part of the training courses, duration for each subject

SUBJECTS	LEARNING OBJECTIVE Participants who successfully complete the program are able to:	TIME (Hours) 40
MODULE - 1 Introduction to Prolotherapy		8
a. Definition, history and importance of prolotherapy.	Define prolotherapy.	
b. Physiology of wound recovery.	Briefly explains the history of prolotherapy.	
c. Joints, connective tissue, ligaments, functional anatomy of muscles	Discuss the importance of prolotherapy.	
d. Connective tissue function and bio-mechanic	Summarize tissue repair cascade, duration and physiology in wounds.	
e. Definition of tensegrity and its function	Summarize joints, connective tissue, ligaments, functional anatomy of muscles.	
f. Effect mechanism and scientific basis of proliferation	Explain connective tissue function and bio-mechanic.	
g. Mapping of injection area	- Explain tensegrity and its function. - Explain effect mechanism and scientific basis of proliferation. - Explain the need for mapping of injection area and the matters that need attention.	
MODULE – 2 Prolotherapy Injection Principles		4
a. Proliferate solutions used in prolotherapy	Explain the features of proliferate solutions	
b. Preparing the mixture	Explain how to prepare the mixture needed for application	
c. Application techniques	List application techniques of prolotherapy	
d. Application materials	List application materials needed for prolotherapy	
e. Factors affecting the effects of prolotherapy	Explain factors affecting the effects of prolotherapy	

Table 1: The subjects and learning objectives to be included in the theoretical part of the training courses, duration for each subject

SUBJECTS	LEARNING OBJECTIVE Participants who successfully complete the program are able to:	TIME (Hours) 40
MODULE - 3 Secondary and Iatrogenic Effects of Prolotherapy		4
a. Injection-related side effects during application (pain, phobia, bleeding, ecchymosis, infection, severe inflammation) b. Effects related to the irritant solution used during application (incompatibility, allergic reactions, pain, flash, erythema, rebound) c. Prolotherapy counter indications	• Explain injection-related side effects during application • Explain effects related to the irritant solution used during application • Explain side effects arising from prolotherapy application technique, the measurements to be taken and necessary precautions • Explain prolotherapy counter indications	
MODULE - 4 Prolotherapy Application Areas		24
Classification of prolotherapy applications according to the anatomical areas and application conditions • Knee area • Elbow area • Hand and wrist area • Foot and ankle area • Shoulder area • Lumbo-Sacral and pelvis area • Hip and pelvis are • Thorax area • Head and neck area	• Explain usage indications of each application area • Summarize anatomical features of each application area, explain briefly injection areas and risky areas • List usage conditions of each application area • List usage conditions of each application area • Explain session numbers and durations of each application area • Define effect mechanism of prolotherapy on each application area • Explain what needs to be done when the application is ineffective • Explain the supporting effects of prolotherapy when used with other treatment methods • List the success factors of treatment	

Table 2: The subjects and learning objectives to be included in the practical part of the training courses, duration for each subject

MODULE	LEARNING OBJECTIVE Participants who successfully complete the program are able to:	TIME (Hours) 80
1. 6 Asepsis - antiseptis	List Asepsis - antiseptis application areas	
2. Preparing the patient, anamnesis, physical examination, evaluation of laboratory and medical imaging methods before treatment, requesting the missing ones from the patient Palpation techniques Drawing anatomical areas on skin	• Explain how to prepare the patient • Take anamnesis from the patient • Explain physical examination application • Prepare the patient for correct application. (Give the patient appropriate position and ensure comfort, give himself/herself appropriate position and ensure comfort, adjust table height, sitting position, and lighting.) • Have experience in anatomical localization and pathological tissue detection by using palpation techniques. • Draw anatomical tissues on the patient without changing the patient's position before the application.	
3. Diagnosis and treatment principles	Perform correct diagnosis and treatment principles.	
4. Approaching patients with pain and application	Perform appropriate approaching techniques to the patients.	
5. Session intervals, numbers, irritant solution dosage and application techniques	Decide on session intervals, application numbers and dosage and apply them.	
6. Recommendations to the patient after the application	Give the patient information on what to do and what not to do after prolotherapy application, give recommendation on exercise, correct usage of body mechanisms and nutrition.	

Table 2: The subjects and learning objectives to be included in the practical part of the training courses, duration for each subject

MODULE	LEARNING OBJECTIVE Participants who successfully complete the program are able to:	TIME (Hours) 80
7. a. Application techniques and principles b. Application practices Knee area Elbow area Hand and wrist area Foot and ankle area Shoulder area Lumbo-Sacral and pelvis area Hip and pelvis are Thorax area Head and neck area	a. Before prolotherapy injection; appropriate intradermal anesthesia, demonstrate injection with vertical angle to the bone for each time bone contact • Demonstrate skin shift, skin compression, working with both hands, changing injection angle when necessary for correct application • Demonstrate different injection holding techniques for different areas • Demonstrate methods for distinguishing the different senses given by tendons, ligaments, cartilage tissue, fascia, joint capsules and for separating tissues b. Know and use injector tips of different thickness used for different areas for safe injection	
8. Prolotherapy needles and injector usage	Know and use injector tips used in prolotherapy	
9. Preparing products that will be used for application	Demonstrate and prepare products that will be used for application (Such as preparing supports-pillows which will support the patient, preparing injection liquids and the injectors for gloves, preparing gauze, antiseptic liquids, and elastic roll bondages.)	

7.2 Training Materials and Their Features

Materials to be used in the training are as follows:

1. Written training materials including subjects in the training content. (Books, slides, training guidelines, scientific journals, etc.)
2. Audiovisual training materials. (compact discs, video films, pictures, etc.)
3. Training contents, discussions (forums and virtual class sessions), presentations, case studies, videos, voice records, etc. developed in a context-specific perspective for distance learning and transferred into digital environment.
4. All tools and equipment that are supposed to be in a prolotherapy practice center as per the relevant legislation.
5. All kinds of devices and materials related to the training at the place where the training will take place will be considered as training material.

7.3 Duration of Training

The duration of Prolotherapy Certified Training Program is stated in Table 3.

Table 3: The duration of Prolotherapy Certified Training Program	
TYPE OF TRAINING	TOTAL TIME (Hours)
Theoretical Training	40
Applied/Area Training	80
TOTAL	120

7.4. Evaluation of Training (Exam Procedure, Achievement Criteria, Extra Exam Right, etc.)

The training will be evaluated according to the following procedures and principles.

1. Participants who do not fulfill the requirement of compulsory attendance shall not be allowed to participate in the exam.
2. Theoretical and practice exams will be conducted at the end of the training program.
3. Exam questions shall be prepared by the exam committee, composed of minimum three trainers, under the chairmanship of the program officer in a way to cover all the subjects included in the training content. Theoretical exam questions are prepared as multiple-choice questions
4. The participants are supposed to succeed both in theoretical and practice exam separately. Those who score 70 (seventy) points or more (out of 100) in the theoretical exam shall be deemed successful. Those who cannot pass the theoretical exam shall not be allowed to take the practice exam.
5. Those who fail to score this minimum point in the theoretical exam shall be allowed to take the exam 2 (two) more times at maximum; those who cannot pass the exam are supposed to apply the prolotherapy certification training program again.
6. Practice exams are conducted by utilizing Prolotherapy Practice Training Evaluation Form (Annex-1). Every subject in the form is evaluated with the grades Well Adequate (4), Adequate (3), Partly Adequate (2),

Inadequate (1) and Not Evaluated (0). This total is divided into subject number and average score is generated. By multiplying this average score with 25 (twenty five), score is calculated out of 100 (hundred). Applicants who get 70 in practice exam is deemed successful. Theoretical exam questions are prepared as multiple-choice questions

7. The practice exam shall be conducted by practicing on a patient and/or on a model.
8. In the practice exam;
 - a. Treatment planning,
 - b. Prolotherapy application,
 - c. Pre and post-treatment follow-up applications will be evaluated.
9. For certification, the success point of the trainee shall be determined by averaging the points obtained in the theoretical and practice exams.
10. Participants who fail to score minimum point in the practice exam shall be allowed to take the exam 2 (two) more times at maximum; those who cannot pass the exam are supposed to apply the prolotherapy certification training program again.
11. The objections of participants who object to the results of their theoretical and practice exams conducted at the end of the prolotherapy certification training program shall be evaluated and concluded by the certification training providers in 5 (five) days at the latest.
12. Participants who pass the theoretical and practice exams shall be awarded their certificates.
13. The certificate shall be registered by the Ministry of Health.

14. The certificate is valid for seven years. The certificate of those who are meet renewal conditions stated in the certificate renewal criteria shall be directly renewed. For those who do not meet renewal conditions, an exam shall be conducted. If the exam is successfully passed, the certificated of those shall be renewed.

15. If the personnel who receive the training fails to attend for a duration of time because of legally acceptable causes, they may complete their trainings by receiving what they missed at the end of the training. If the participant attends irregularly or does not attend at all, his/her training shall be revoked and he/she will be deemed unsuccessful.

8. PROGRAM OFFICER AND HER/HIS QUALIFICATIONS

Physicians and teaching staff of the related field are the program officers of the prolotherapy certification training program.

9. TRAINERS AND THEIR QUALIFICATIONS

Those who have any one of the following requirements may be assigned as trainer:

1. Physicians who hold prolotherapy certification.
2. Physicians or academicians who have specialty in the theoretical courses of prolotherapy
3. Physicians who have published at least two national/international publications on prolotherapy
4. Foreign individuals who can certify that they have prolotherapy training

on an international scale and actively work in related field and deemed appropriate by the commission established by related department.

5. Citizens of Republic of Turkey who can certify that they have prolotherapy training on an international scale and actively work in related field and deemed appropriate by the commission established by related department.

NOTE: Application Centers shall notify Ministry of Health of the trainers' names and qualifications.

10. PROPERTIES OF THE TRAINING PLACE

Prolotherapy Certified Training Program may be given by organizations/institutions which have "application centers" and are authorized to give trainings.

1. For distance learning;
 - a. Learning Management System (LMS) software compliant with international learning content standards (Scorm, AICC, etc.),
 - b. Learning Management System (LMS) Management panel,
 - c. A server and infrastructure architecture in parallel with the capacity of the trainees,
 - d. Ensure that video conferencing software and infrastructures are integrated into the system so as to provide synchronous training.
2. have a training hall which has sufficient equipment and where the participants can receive interactive training,
3. have a training hall which is warm and bright enough as well as being spacious, where a modular system can be used, which has a capacity

in the number of the participants to be trained, and which can be divided into two separate training halls when necessary,

4. have adequate number of chairs and desks for participants,
5. have a server and infrastructure architecture in parallel with distant learning,
6. integration of video-conference software and infrastructure to the system for the provision of synchronous training.
7. having Traditional and Complementary Medicine Practice Center, which is opened upon the permission of the Ministry.
8. have computer and audiovisual devices which will allow for carrying out the training using appropriate technology; practice models; a blackboard; a printer, photocopy machine and paper support systems ensuring that participants are provided with training objectives, subjects and contents/presentations; preferably an internet access enabling that online and visual animations/training materials are used.

11. VALIDITY PERIOD OF THE CERTIFICATE

The validity period of the certificate is 7 (seven) years.

12. CERTIFICATE RENEWAL CRITERIA

Certificates shall be renewed pursuant to below mentioned criteria.

1. At the end of the validity period of the certificates, among the certificate-holders;
 - a. Those who document that they attended national/international

- trainings or scientific meetings on prolotherapy at least 4 (four) times within the validity period of the certificate after receiving that certificate
 - b. those who published an article on prolotherapy in 2 (two) national/international scientific journals,
 - c. those who document that they worked actively on this field for 2 (two) years are awarded a certificate extension (for 7 more years). The certificate-holders will submit their documentation related to these criteria during the recertification application to the certification training providers that awarded the certificate to them.
2. Those who do not fulfil any criteria in paragraph a need to apply for renewal exam and pass it successfully.
 3. The renewal exam shall be conducted as a theoretical exam consisting of multiple-choice questions prepared in line with the recent developments in the field and the subjects in the prolotherapy certification training program by the providers of prolotherapy practice certification training program under the coordination of the relevant unit of the Ministry.
 4. The participants who score 70 (seventy) or more points in the renewal exam shall be deemed successful and the duration of their certificates shall be extended for another 5 (five) years.
 5. The certificates of the certificate-holders are valid until the recertification exam process is completed.
 6. The certificates of those who fail to attend the certification renewal exam twice in a row shall be deemed invalid, except in cases of legally acceptable excuses. Following the end of the legally acceptable excuse, they are tested as soon as possible.
 7. In cases when the training activities of the entity with the authorization to provide certification training program are stopped or its certification training provision authorization documents are cancelled for any reason or in cases of shut-down and transfer, the recertification exams shall be conducted by the relevant unit of the Ministry.
 8. The objections of the certificate-holders, who failed in the certification renewal exam, to the renewal exam results shall be evaluated and concluded in maximum 5 (five) days by the certification renewal exam committee.

13. EQUIVALENCE APPLICATION AND PROCEDURES AND PRINCIPLES OF EQUIVALENCE PROCESSES

13.1. Equivalence Application

Equivalence shall be requested by using the equivalence application form (Annex-2) prepared by the Ministry in line with the provisions of the Regulation on Certification Training of the Ministry of Health. It is mandatory to submit all the documents specified in this form. Each section specified in this form shall be filled in detail, the original copies of the below-listed documents approved by the institution/organization which provides the training and the translation of the documents into Turkish by

a certified translator if the training is received abroad shall be submitted as attachment to the form.

13.2. Documents to be attached to the Application Form

1. Notarized copy of the certificate.
2. Notarized copy of the Faculty of Medicine diploma.
3. Notarized copy of postgraduate education certificate, if available.
4. Notarized copy of Turkish Identification Card/Foreign Identification Card and 2 (two) photographs.
5. All information and documentation related to the Training Curriculum specified in the 4th paragraph of the Application Form. (In Turkish and in the language of the training and the document.)
6. Document proving that Physicians received at least 120 hours of theoretical and practical training with the Training Curriculum.
7. The applicant will be requested to submit a document which is received from the official health authority of the country of training or the head of mission of Turkey and shows that the Institution/Organization/Private Law Legal Entity/Natural Person who/which provided the training and who/which is included in the 3rd paragraph of the Application Form is authorized to provide training
8. The applicant will be requested to submit a document showing that s/he resided in the country in which s/he received training during the training period with his/her passport or other official documents and the formally-commissioned officials

will be requested to provide documentation proving that they were off duty in the said period.

13.3. How to carry out the Equivalence Procedures

1. The application files of those who apply for certificate equivalence shall be examined in line with the Prolotherapy Certified Training Program Standards by a prolotherapy practice-certified scientific committee.
2. The applicants whose files are deemed suitable and sufficient shall be tested with theoretical and practical exam.
3. Those who score 70 (seventy) points or more (out of 100) in the theoretical exam shall be deemed successful. Those who fail to score this minimum point in the theoretical exam shall be allowed to take the exam 2 (two) more times at maximum; those who cannot pass the exam are supposed to apply to the Prolotherapy Certification Training Program again.
4. Those who cannot pass the theoretical exam shall not be allowed to take the practice exam.
5. Participants who score 70 (seventy) points or more (out of 100) in the practice exam shall be deemed successful. Those who fail to score this minimum point in the practice exam shall be allowed to take the exam 2 (two) more times at maximum; those who cannot pass the exam are supposed to apply to the Prolotherapy Certification Training Program again.
6. Certificate Equivalency Document shall be drawn up for applicants

who pass the theoretical and practice exams.

7. Certificate Equivalency Document shall be registered by the Ministry of Health.

14. PROVISIONAL CLAUSE

Those who have any of these below mentioned qualities before the issue date of this Standard:

- a. Having written 2 (two) nationally/internationally acknowledged and/or published scientific papers related to subject,
- b. Having written a book or 2 (two) parts in a book related to the subject
- c. Having postgraduate thesis on related subject,
- d. Having worked as a researcher or director of a scientific project of a university or TÜBİTAK (The Scientific and Technological Research Council of Turkey) on related subject,
- e. Having postgraduate thesis supervisory experience on related subject on the condition that they apply to Ministry of Health within 6 months pursuant to the issue date of this standard, the application shall be examined by the commission that shall be composed by related department in the Ministry and applicants deemed proper shall be awarded Prolotherapy Certification Equivalence without any examination for one time only.