



[ORIGINAL ARTICLE]

Development of simulation training in emergency management for dentists: Dental Crisis Life support course and early experience from 2007 to 2011, in Japan

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ABSTRACT

We developed simulation training system for dental emergency management in Japan. The system is termed as Dental Crisis Life Support (DCLS) course. Task force of emergency physician and dental oral surgeons designed a course schedule and DCLS course guide book as text. Outline on early activities of DCLS in Japan is presented.

Introduction

License of Medical Doctor and Dental Doctor have been separated and each education system has been independent in Japan. Education for emergency management has been insufficient in dental school. Therefore, rare but lethal medical emergencies do occur in private dental clinic. These low-frequent and important accidents could be trained by an adequate curriculum with simulation training¹⁾. We developed the Dental Crisis Life Support (DCLS) course and published course textbook²⁾.

Methods

General instructional objective, GIO, of the Dental Crisis Life Support (DCLS) is to learn an appropriate response to dental crisis and an appropriate team

management³⁾.

Specific behavioral objectives, SBOs, are

- 1) Basic Life Support,
- 2) Automated External Defibrillator (AED) operation skill,
- 3) Airway management,
- 4) Management of accidental ingestion and aspiration,
- 5) Anaphylaxis
- 6) Collapse.

Course time table is shown in Figure 1.

Task force of emergency physician and dental oral surgeons designed a course schedule and DCLS course guide book²⁾ as text (Figure 2).

Results

The first DCLS course was held by the 52th annual meeting of Japanese Society of Oral and Maxillofacial Surgery in 2007. Until the end of 2011, we held total 26 courses and total of 250 dentists had participated

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The DCLS course schedule Modules				
DCLS-course	08:00-9:00	60min	Instructor meeting	
	09:00-09:20	20min	Introduction	
	09:30-11:00	90min	1)BLS 2)AED Operation Skill	
	11:00-11:50	50min	3)Airway Management (Tracheal intubation etc.) 4)Management of Accidental ingestion and Aspiration 5)Anaphylaxis 6)Collapse	
	11:50-12:30	40min	6)VF/pVT(defibrillation)PEA/Asystole(drug) Monitor/ Defibrillator	
	12:40-13:10	30min	Skill test	
	13:10-14:00		Lunch Coffee brake	
	14:00-14:50	50min	Skill Session	Primary ABCD Free scenario Team Discussion and debriefing
	15:00-15:50	50min		Advanced ABCD(1) Free scenario Team Discussion and debriefing
	16:00-16:50	50min		Advanced ABCD(2) Free scenario
	17:00-17:20	20min		Crisis management Simulation by all members
	17:20-17:30	10min		Completion ceremony

Fig. 1. Time table of Dental Crisis Life Support

in Dental Crisis Life Support: DCLS⁴⁾. Post course questionnaire demonstrated that most of participants were satisfied for the course quality⁵⁾. The most advantage of this course was refill of the lack of knowledge regarding resuscitation⁶⁾.

Discussion

In Japan, the dentist's law stipulates as follows. Clinical training involves dentists frequently in general medical practice while recognizing the social role to be played by dental medicine and dental care, regardless of the field to which the dentist fosters personality as a dentist and specializes in the future. It must be able to acquire basic medical care skills so that you can respond appropriately to injury or illness. The Minister of Health, Labor and Welfare shall designate an independent clinical training facility unless it is deemed that the hospital or clinic complies with the following items in the case of application. However, that in the case of conducting clinical training jointly with a training cooperation facility, with regard to the matters list. We also consider the situation of the training cooperation facility pertaining to the issue.

(1) To have a training program that is based on the basic philosophy of clinical training.

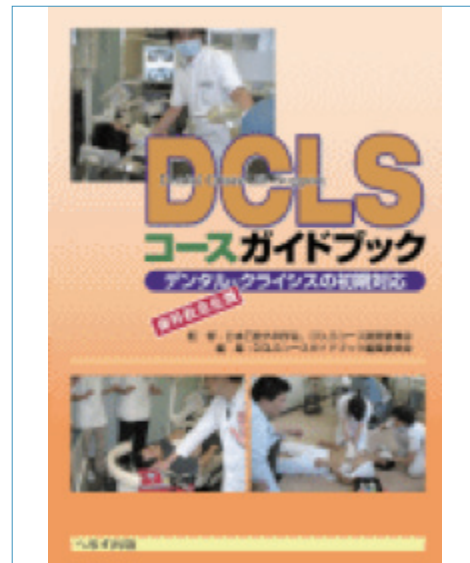


Fig. 2. DCLS course guidebook (in Japanese): ISBN 978-4-89269-580-3

- (2) To have personnel necessary for doing clinical training.
- (3) Clinical departments necessary for doing clinical training.
- (4) There are cases necessary for conducting clinical training.
- (5) Have facilities and facilities necessary for the implementation of clinical training.
- (6) To properly manage information on medical history of patients.
- (7) Securing a system for safety management concerning medical care.
- (8) Establish training management committee.
- (9) Proper placement of program manager.
- (10) To have appropriate guidance system.
- (11) The number of training dentists to accept is appropriate for conducting clinical training.
- (12) The recruitment and recruitment methods of dentists are appropriate for implementation of clinical training.
- (13) Secure appropriate treatment for dentists.

At the first point, DCLS was an abbreviation for Dental Cardiac Life Support as ICLS, by Japanese Association for Acute Medicine, stands for Immediate Cardiac Life Support. However, the Ministry of Health, Labor and

Welfare pointed out that the area of dental treatment is limited to teeth and their surroundings legally, and that the word cardiac is not suitable. Therefore, we used the word crisis such as Dental Crisis Life Support. The word Crisis is a preferable word because it means various critical situations in dental practices.

Conclusion

Dental Crisis Life Support (DCLS) course should be an effective tool for the education for dental patient safety in dental practices. Further study to verify the efficacy of the DCLS course for patient safety⁷⁾. In Japan, since doctors and dentists are clearly distinguished legally, dental crisis response and patient safety training requires unique contents. We are convinced that DCLS is the training content that is the forerunner of training in the dental field.

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要 旨

歯科診療危機対応コース DCLS の開発と初期経緯

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日本では医師法と歯科医師法は別個の法律であり、歯科医師の診療は歯科医師法に基づく。このため、救急医療やプライマリケアなど卒後初期臨床研修における患者の初期対応のレベルにおいても研修カリキュラムは明確に区別される。

そこで、我々は、歯科医師の救急蘇生研修のための研修法として、歯科診療危機対応コースを策定した。本研修の英語名称は、厚生労働省の指摘により循環器 cardiovascular は厳密な意味で診療範囲ではないので危機的状況を指す crisis を用いて、Dental Crisis Life Support: DCLS とした。研修内容は、気道管理、循環補助、心肺蘇生、薬物投与、AED など、医科の救急蘇生研修と同等であるが、厚生労働省の歯科救急診療の指針を遵守したものとなっている。

DCLS は 2007 年に完成し、国内で研修コースとして展開しており、国際学会でも発表している。本稿では 2011 年までを初期展開と位置付け、その概要も述べる。

キーワード：Dental Crisis Life Support, 救急医療, BLS

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