International Science Group

ISG-KONF.COM

XXV

INTERNATIONAL SCIENTIFIC AND PRACTICAL CONFERENCE "THEORETICAL FOUNDATIONS OF SCIENTISTS AND MODERN OPINIONS REGARDING THE IMPLEMENTATION OF MODERN TRENDS"

San Francisco, USA

June 27 - 30, 2023

ISBN 979-8-88992-684-9

DOI 10.46299/ISG.2023.1.25

PECULIARITIES IN TEACHING THE TOPIC "HEMOSTASIS AND ITS DISTINGUISHING FEATURES IN MAXILLARY-FACIAL AREA AS A WHOLE AND ORAL CAVITY PARTICULARLY" TO THE INTERNATIONAL DENTAL STUDENTS

Tkachenko Olena
Candidate of medical sciences, Physiology chair assistant
Poltava State medical university, Ukraine

Pavlenko Hanna
Candidate of medical sciences, Physiology chair associate professor
Poltava State medical university, Ukraine

Al-Jawabreh Jad Sami Jadallah
General Practitioner, Masa Clinic, Jordan

Sartipi Hamed Nosratolla
Dentist, Ukrainian medical stomatological academy Dental faculty graduator

Abbassi Marouane
International Faculty student by speciality "Dentistry"
Poltava State medical university, Ukraine

Hemostasiopathies take the 1st position in morbidity structure by WHO. Vascular complications appeared during operative manipulations in maxillary-facial area are rather often to be met unfortunately for example rare traumatic aneurysms of the face and temple [1], external carotid artery aneurysm in turn causing facial nerve paralysis [2; 3], pseudoaneurysms, maxillary artery arteriovenous fistulae embolization after Le Fort I osteotomy [4]. Orthognathic surgery represents such a Dentistry branch accompanied by especially high incidence of vascular complications with an essentiality to perform a proper hemostasis [5] and oral surgery as a whole [6]. There can be internal maxillary artery initial part hemorrhage at this artery treatment with multiple ligations [7]. Radiation therapy can be also accompanied by the patient's external carotid artery pseudoaneurysm that is undergone to endovascular treatment [8]. Proximal facial artery pseudoaneurysm can be presented as oropharyngeal hemorrhage [9]. More habitually to see that bleedings can be as a result of tooth extraction; there can be facial artery pseudoaneurysm following surgical removal of mandibular molar [10]. Specialists from every country use common and special procoagulants, in part from India. Venous thromboembolism and DIC-syndrome were depicted as dangerous complications; their peculiarities were determined in maxillary-

facial area; it is known in part that DIC-syndrome has autoimmune course in this area by Sanarelli-Shwartsmann's reaction type; it is important to remember for the students and for the doctors that cancerous thromboplastin belongs to the strongest. It should be mentioned that professiogenesis in PMSU dental students is early, beginning with the 2nd year of their study.

Not only coagulational, but vascular-platelet hemostasis is supported in a clinical dental practice, particularly by means of platelet concentrates use in oral and maxillofacial surgery. Choosing a proper anticoagulant during an operation represents very actual problem in part in oral surgery [11].

These review data testify to the topic studied actuality.

Modern education created essentiality to use blended education both at clinical (in part oral surgery) [12] and theoretical academic disciplines, for dental and medical students.

Our dental students from International faculty prefer using intra-disciplinary and inter-disciplinary integration in a bigger extent than the domestic ones that in turn is applied by the tutors during practical lessons at oral cavity non-specific functions hemostasis in its wide aspect belongs to [13]. We consider hemostasis in its wide aspect as an integrity of primary (vascular-platelet, microcirculative) and secondary (congulational or blood coagulation) hemostasis; procoagulative and anticoagulative links (primary and secondary anticoagulants, fibrinolysis system with its pro-fibrinolytics); therefore we consider hemostasis system task much more than only bleeding stoppage but widen it to maintaining a proper rheology that is impossible without anticoagulants themselves, fibrinolysis system, negative charge on intact endotheliocytes and formed elements to prevent platelets adhesion, erythrocytes and thrombocytes aggregation, blood velocity contributes in a good rheology maintaining and the teachers explain their students that women have less blood velocity than men in part in their lower extremities that creates a significant predispositions to thrombosis development with further possible danger to miscarriages and abortions; tendency to iliac veins thrombosis with further abortion is significant at thromboxane B2 appearance in blood in women which is more active than the strongest proaggregant thromboxane A2. Oral cavity non-specific functions are studied after blood system physiology and the International students repeat the data about hemostatic mechanisms in blood received earlier while demonstrating significant intra-disciplinary integration. The teachers pay attention to maxillary-facial area as a whole and oral cavity particularly role in hemostasis in a described wide aspect [14]. We were mentioning about International students love to inter-disciplinary integration and that is why the topics studied actuality in Dentistry various branches can represent the topic much more than one synopsis together with interrelations between maxillary-facial area and blood system physiology and pathophysiology at the lessons of Physiology and dental disciplines of therapeutical and surgical profile because as we can see bleedings stoppage and reaching a proper hemostasis is of crucial importance in surgical dental practice significantly [15]. Physiologists mark in part that any inflammatory process has two phases in relation to hemostasis: hypercoagulation when the causative agents get imprisoned in fibrin net with formed elements and further hypocoagulation to wash

them all up. Taking into consideration very big distribution of various vasculopathies, coagulopathies on erythrocytic, vascular-platelet and coagulational hemostasis special attention is paid to proper hemostasis backgrounding in maxillary-facial area and main developmental mechanisms of hemostasis disturbances at Physiology lessons.

Thus, work with International dental students is distinguished by significant intra- and inter-disciplinary integration, much in bigger extent comparatively to work with domestic students; the students from other countries like synopses, participate in the activity of students' scientific conferences with the reports, abstracts and articles on the topics between theory and practice, between Physiology and different dental disciplines. Therefore one can mention significant connections between educative and scientific activity in the International students [16]. They know foreign languages much better than the domestic students; it helps them both in educative and scientific activity greatly.

References

1. Conner WC III, Rohrich RJ, Pollock RA. Traumatic aneurisms of the face and temple: a patient report and literature review, 1644 to 1998. Ann Plast Surg. 1998; 41; 321-326.

2. Taher AA. Traumatic external carotid artery aneurysm causing facial nerve paralysis. A case report. Int J Oral Maxillofac Surg. 1991; 20: 88-89.

3. Hertzer NR. Extracranial carotid aneurisms: anew look at the old problem. J Vasc Surg. 2000; 31: 823-825.

4. Albernaz VS, Tomsick TA. Embolization of arteriovenous fistulae of the maxillary artery after Le Fort I osteotomy: a report of two cases. J Oral Maxillofac Surg. 1995; 53: 208-210.

5. Kim SG., Park SS. Incidence of complications and problems related to orthognathic surgery. J Oral Maxillofac Surg. 2007; 65: 2438-2444.

6. Olson NJ, Shajani-Yi Z, Cervinski MA, Ornstein DL. Clinical Chemistry. 2016; 62(12): 1676-1677.

7. Yin NT. Hemorrhage of the initial part of the internal maxillary artery treated by multiple ligations: report of four cases. J Oral Maxillofac Surg. 1994; 52: 1066-1071.

8. Yuen JC, Gray DJ. Endovascular treatment of a pseudoaneurism of a recipient external carotid artery following radiation and free tissue transfer. Ann Plast Surg. 2000; 44: 656-659.

9. Germiller JA, Myers II, Harris MO, Bradford CR. Pseudoaneurysm of the proximal facial artery presenting as oropharyngeal hemorrhage. Head Neck. 2001; 23: 259-263.

10. Rayati F, Parsa H, Abed PF, Karagah T. Facial artery pseudoaneurysm following surgical removal of a mandibular molar. J Oral Maxillofac Surg. 2010; 68: 1683-1685.

11. Cena D, Milka Z, Katerina Z, Lidiya P, Mirjana P. Traditional versus new oral anticoagulants in clinical practice of oral surgery. Research Journal of Pharmaceutical, Biological and Chemical Sciences. 2016; 7(5): 170-177.

12. Marei HF, Al-Khalifa KS. Pattern of online communication in teaching a blended oral surgery course. European journal of dental education: official journal of the Association for Dental Education in Europe. 2016; 20(4): 213-217.

13. Мищенко ВП. Физиология гемостаза и ДВС-синдром.Полтава.1993.164с.

14. Мищенко ВП, Силенко ЮИ. Пародонт и гемостаз. Полтава: Рік, 2001.151с.

15. Мищенко ИВ, Павленко АП, Коковская ОВ. Физиология системы крови: учебно-методическое пособие для студентов.Полтава,2022.211с.

16. Zhukova MYu, Tkachenko OV. Connections between scientific and educative activity in the foreign students. Матеріали міжнародної науково-практичної конференції «Біологічні, медичні та науково-педагогічні аспекти здоров'я людини», Полтава, 2022: 185-188.