

в кодоне 918 гена *RET* свидетельствует о самом агрессивном типе синдромов – МЭН2Б и возможность раннего метастазирования заболевания и соответственно планирования возраста тиреоидэктомии, выбор которого проводится индивидуально, но не позднее первых 5 лет жизни. Синдром семейного МРЦЖ протекает менее тяжело и возникает в более позднем возрасте. ДНК-диагностику в семьях с МЭН 2 следует проводить основываясь на вариантах этого синдрома и в соответствии с характеристиками мутаций гена *RET*.

Проведенный генетический анализ МРЦЖ позволил разработать комплексную программу выявления лиц, предрасположенных к развитию этого заболевания и включает три этапа мероприятий: 1) выявление и регистрация семей с МЭН2; 2) ДНК-диагностику бессимптомных членов семей с наследственным МРЦЖ («группа риска»); 3) клинический мониторинг индивидов из группы риска. В отличие от традиционных методов выявления, как начинающейся малигнизации щитовидной железы, так и наличия МРЦЖ, генетическое тестирование гена *RET* позволяет выявлять потенциальных больных до появления у них клинических или биохимических признаков развития медуллярного рака, расширяет диагностические, профилактические и терапевтические возможности при наследственных синдромах МЭН2 и должно быть внедрено в онкологическую практику.

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Rezumat

Detectarea mutației germline *RET* proto-oncogene, care predisune la neoplazie endocrină multiplă de tip 2 (MEN 2), a permis un diagnostic precoce și un tratament chirurgical profilactic pentru pacienții cu aceste mutații.

Summary

The detection of germline mutations in the *RET* proto-oncogene, predisposing to multiple endocrine neoplasia type 2 (MEN 2), has allowed an early diagnosis and prophylactic surgery treatment for the patients with these mutations. Among 68 patients with medullary thyroid carcinoma (MTC) were identified 24,9% hereditary forms MTS such as MEN2A (7,4%), MEN2B (11,7%), familial MTC (4,4%) and MTS as component of neurofibromatosis (1,4%). Two different germline *RET* mutations at the codon 634 were revealed in 12 patients with MEN2A. From all the patients with MEN 2B the same mutations at the codon 918 were identified, but the germline mutation in this gene of their mothers was not revealed. Persons with syndrome familial MTC had mutation at the codon 634. Direct DNA analysis for mutations in the *RET* proto-oncogene has identified 8 relatives as gene carriers of MEN 2A in whom thyroid carcinoma will develop. Of these 6 patients underwent thyroidectomy. Two of them (3,5 and 9 years) presented prophylactic surgery, the other four (14 years and older) had thyroidectomy at the early stage of the disease. The youngest patients have the best therapeutic results after surgery. A median follow-up of 5 years (ranged from 2 to 8 years), all patients were well and cancer free. Correlation between specific *RET* mutation and effect of the pace of malignant progression was analyzed.

INITIATION OF PROSTHETIC SERVICE AND COMPLEX REHABILITATION FOR PATIENTS AFTER EXTENSIVE OPERATIONS FOR HEAD AND NECK TUMORS, CONGENITAL DISEASE AND TRAUMATIC INJURIES, MAXILLO-FACIAL PROSTHETICS IN PMSI ONCOLOGIC HOSPITAL, CHISINAU

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Introduction. In the Republic of Moldova, maxillofacial prosthetics service is a new, developing domain and first in the field of Head and Neck Oncology. The PMSI Oncological Institute is organising a clinic of

maxillofacial prosthetics in order to treat patients with oral and facial defects after combined multidisciplinary treatment. The infrastructure of the department is from the founding date of the hospital. A basic structural organisation of patient planning for every day consultations is present.

Epidemiology. The incidence of head and neck cancer in the Republic of Moldova has increased in the last decades. In the last decade the incidence was:

- Lip cancer (COO) is variable from 94 to 98, with 5 year survival of 45,3%;
- Head and neck cancer (CO1-CO14) incidence shows a variation from 258 up to 274 to 231, with a five-year survival of 34,7%;
- Melanoma (C43) incidence shows an increase from 58 to 82, with a five-year survival of 47,4 %.

Project of PMSI Head and Neck oncology. The purpose of the present project is to start a new service in the PMSI Institute of Oncology – a health care team for these types of cancer is formed from specialists from different fields, such as: head and neck oncology surgeon, oncologist, radiotherapist, chemotherapist, reconstructive surgeon and maxillofacial prosthodontist, technician and palliative care doctor.

The main objective is the organization of a new health care service, that will raise the quality of life for a large group of patients with physical incapacities, caused by oral and facial defects. This category of patients also needs psychological rehabilitation and integration into family and society. The project will support the existent national health system and social protection assistance.

The prosthetic service comprise of a doctor with competence in head and neck, a technician and a palliative care doctor.

Project organization and realization. The implementation of a multidisciplinary team supports the main objectives for organization, therefore the efforts that have to be taken by the doctor promoters, were divided into four steps.

1. Organization and initiation of a rehabilitation service (prosthetic and palliative) in the Republic of Moldova (PMSI Institute of Oncology), that will offer qualitative services and treat patients with facial defects after combined anticancer treatment and extensive operations for head and neck tumors and patients after traumatic injuries.
2. Finding funding for the initiation, reconstruction and refurbishing of the offices for prosthetic service and the department of Head and Neck Oncology of PMSI.
3. Finding funding for the necessary equipment and materials for prosthetic service activity.
4. Theoretical and practical training for the future prosthetic service team members (prosthesis specialist, technician, head and neck Oncologist and palliative care doctor).

Step1: Organization and initiation: The project started in 2007 with an initial agreement among PMSI, the Ministry of Health and the University of Groningen, the Netherlands. The project plan was described by Dr. Mindruta, Dr. Pogonet and Dr. van Oort in 2008. In 2009, a contract to initiate the department was signed by four parties: the PMSI Hospital, the Foundation Smiles for Moldova, the Foundation Werkgroep Urgenta, as the international coordinator, and Acasa as the local administrative and coordinating office.

Step 2: The funds for the renovation of the offices for dental service and the renovation of the department of Head and Neck Oncology were raised by a 4000 kilometer kayak tour, by Mr Jurgen van der Pol from Groningen to Chisinau (Foundation of Smiles for Moldova). This doubled the already existing fund initiated by colleagues, patients and friends of Dr van Oort, from 2007. The Foundation Smiles for Moldova (Groningen, NL) raised funds to implement the project, with a considerable financial support from NCDO, the Foundation Janivo and from the Dutch Consulate in Moldova.

Step 3: In order to find funding for the equipment, the Foundation Smiles for Moldova raised financial means with the support of the Innovation Fund of Dutch Insurers (NL), the Dental Laboratory van Dijk (NL), the Foundation of Anton Jurgens (NL), the Hans Blankert Fund.

Step 4: The 6 week theoretical and practical training course in prosthetic rehabilitation for dentists and technicians will be offered by the University Medical Center Groningen, Center for Maxillofacial Prosthodontics and special Dental Care. The Head and Neck Oncology training for the oncologist and palliative care doctor will be adjacently organized. PUM, NL and the UICC (Geneva) will find funding for this training.

In the following two years training courses in maxillofacial prosthesis will be organized in Republic of Moldova accordingly to the collaboration plan with colleagues from Center for Maxillofacial Prosthodontics and special Dental Care, UMC Groningen, Holland.

Activities after fundraising. After the fundraising, organizational tasks need to be done such as: making contracts with builders and installation and refurbishing companies. There has to be an agreement in the initial contract, which stipulates that after installation, the maintenance is the responsibility of the PMSI hospital. Making the inventory for the necessary equipment and materials, finding the internal and sponsored sources

for materials for prosthesis, negotiating with the health care insurance company, in order to finance the care for this patients, all these are activities are tasks of all the parties in the contract.

The team responsibilities for the project implementation.

The Head and Neck Oncology Team of PMSI consist in 2010 out of:

1. Project Director, Project coordinator – Dr Rodica Mindruta, doctor with competence in Head and Neck Oncology – member of PMSI Institute of Oncology staff.
2. Assistant Project coordinator – Vadim Pogonet, doctor with competence in Palliative Medicine and Pain Treatment – member of PMSI Institute of Oncology staff.
3. Management Consultant, Dr Victor Cernat, Director of PMSI Institute of Oncology, University Professor, Doctor in medicine.
4. Stomatologist, Maxillofacial prosthodontist in training. Dr. Valentina Luca.
5. Prosthetic technician, maxillofacial Prosthodontist in training, responsible for prosthetics technology Mr. Ivan Vilcu.
6. Dental assistant/nurse.
7. Medical Supervisor in Head and Neck Oncology Prof. George Tsibirna.

Responsibilities of the implimentation in the project persons. Rodica Mindruta – Project coordinator, doctor with competence in Head and Neck oncology is responsible for coordinating and supervising the weekly meeting of clinical case-discussions. Coordination of the operational activity of implementing the project: the coordinator controls the team's activity accordingly to the time schedule and makes the activity reports or delegates this activities to the dental assistant/nurse. The coordinator does patient consultancy and consultancy of the caregivers and participates at the patients evaluation. This professional coordinates the implementation of the project objectives and watches over the lectures and teaching process. The coordinator plans all the activity of the team and its collaboration with other subdivisions of the PMSI Institute of Oncology, the coordinator is the contact person with the external experts.

Vadim Pogonet – Doctor with competence in Palliative care, the assistant coordinator will consult patients and caregivers. He participates at the patients' evaluation and at the implementation of the project's objectives, with participation at the practical and theoretical lectures and courses.

Victor Cernat – Management Consultant, the director of PMSI and his administration will participate at project coordination and implementation and will watch over project implementation.

The administration will support the new team and will facilitate the incorporation of the team into the Institute activities, will coordinate the PS & RC directions and collaboration with Institute of Oncology departments and will participate at assessment of the team's activity. The book keeper of PMSI will calculate the expenses and will be responsible for the financial evidence of the project and will be responsible for the financial reports on the project.

Dr Valentina Luca Stomatologist/prosthodontist ,will be responsible for reporting and documenting the weekly clinical case discussions and preparing the report for the next week. Will inspect the quality of the dental nurses' work and will cooperate with the prosthetic technician. The dentist will coordinate the interactivity between Maxillofacial prosthetic members and PMSI Institute of oncology staff and will be involved in patient, doctor and nurse education. The dentist will perform weekly reports of the prosthetic service.

Mr Ivan Vilcu- Prosthodontic technician, will report and document the weekly clinical case discussions of prosthetics and prepare the planning for the next week. Will assess the quality of the prosthetic service and discuss it in the weekly meetings. The prosthodontic technician will be involved in the education of patients, doctors and nurses.

Dental Nurse, besides the professional qualities, the dental nurse is responsible for the equipment and appliances in the MFP-dental office and the MFP-laboratory. This professional is responsible for the sterilization of the instruments and the disinfection of the equipment and the optimal stock of the dental and prosthetic materials.

Assessment. In the first and second year, an assessment of the clinical function and quality of prosthesis and rehabilitation activity was done during the weekly meetings, where all the team problems were discussed. Each patient will be discussed within the assessment of the provided treatment.

The quality of treatment control will be assed using questionnaires.

At the end of each quarter, assessment will be done using the following data:

- Number of consulted and treated patients;
- Number of consulted PMSI Institute of Oncology staff members;
- Number and quality of provided prosthesis;

- Number of trainings, courses and lectures to the MMPCT members and medical staff.

At the end of each quarter, assessment will be performed using the following data:

-The number of consulted patients;

-The number of consulted caregivers;

-The number of repeated consultancies and the causes of the repeated consultancies;

-The number of consulted PMSI Institute of Oncology staff members in the field of advanced cancer symptom control;

-The number of trainings, courses and lectures for the team members and medical staff.

Expected results. A multidisciplinary team Head and Neck Oncology in the PMSI Institute of Oncology in action.

The team members have the necessary qualification to perform a gold standard for Head and neck oncology and maxillofacial rehabilitation (figure 1 and 2). In the first year, 50 new head and neck oncology patients and their caregivers were consulted by the Head and Neck oncology team.

A good assistance to medical staff of the PMSI Institute of Oncology for a comprehensive approach to the cancer patient with advanced disease and complementary assistance in the frame of the Institute of Oncology and outside it.



Figure 1. Surgical resection prosthesis after hemimaxillectomy

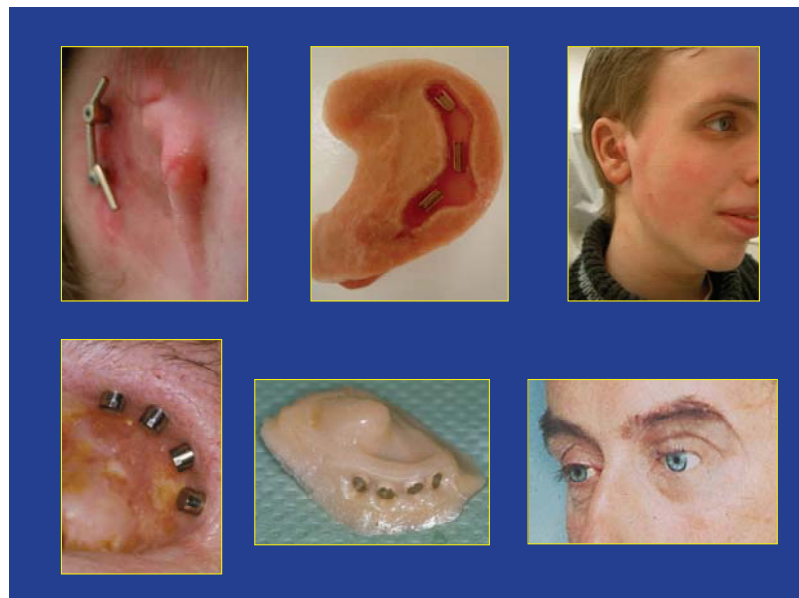


Figure 2. Facial prosthesis based on titanium implants



Figure 3. Oral and dental care before, during and after radiotherapy

Rezumat

Proiectul reprezintă prima etapă de creare a unui centru pentru protezele maxilo-faciale în Republica Moldova. Proiectul de asemenea va asigura integrarea Institutului Oncologic în programele internaționale pentru protezele maxilo-faciale.

Summary

This project will initiate the prosthetic rehabilitation of head and neck oncology patients in the PMSI Institute of Oncology. The project will establish the basis for maxillofacial prosthetic Center and will serve as a starting point for the development of maxillofacial prosthetic services in the country. The Project will create conditions for involvement of the PMSI Institute of Oncology in the international system of Maxillofacial Prosthetics, the formation of partnerships and collaboration with similar medical units which are coordinated by the Institute of Maxillofacial Rehabilitation. (ISMR).

FORMAȚIUNI CHISTICE ALE PLEXURILOR COROIDE

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Actualitatea. Interesul față de studierea vascularizației sistemului nervos central, inervarea vaselor cerebrale și ale meningelui persistă de-a lungul anilor. Programele de cercetări științifice vizează problema asigurării funcțiilor vitale ale organismului, ce depind de activitatea encefalului. Anume sistemul sangvin, reglat de sistemul nervos, soluționează această problemă.

Problemele ce vizează contribuția sistemului nervos în mecanismele de declanșare și dezvoltare a diverselor procese patologice ocupă un loc primordial în cadrul științelor medicale contemporane și constituie una din căile de soluționare a multor aspecte contradictorii și necunoscute în acest domeniu. Ca răspuns la diverse acțiuni ale factorilor mediului extern și intern, sistemul neurovascular se manifestă prin diferite reacții de răspuns, exprimate prin modificări mai mult sau mai puțin pronunțate ale structurilor componente cu caracter compensatoriu, reactiv sau distructiv.

Studiul nostru este consacrat plexurilor coroide din ventriculele creierului. Tema respectivă este actuală deoarece cu fiecare etapă de dezvoltare a histologiei și histofiziologiei apare necesitatea de a revizui unele concepții anterioare, apar întrebări suplimentare. Ele se referă la histogeneza, structura și funcțiile plexurilor coroide.

Cercetările efectuate asupra plexurilor coroide sunt necesare nu numai din punctul de vedere al teoriei, ele fiind importante și pentru medicina practică. Medicul trebuie să cunoască diversitatea activității normale a unor astfel de organe, să le înțeleagă, să aprecieze corect modificările produse în ele, în limitele normei și în diverse stări patologice.