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On the history of the development of mastology service in Kazakhstan

The current state of Kazakhstani oncomastology comes of former scientific advances and is of certain interest for future oncologists. The article describes the main stages of the formation and development of mammalogical service in Kazakhstan, the biography of the Kazakh scientist, Doctor of Medicine, professor, honored worker of the Republic of Kazakhstan, academician of the International Informatization Academy Asker Esenkulov, and his scientific and practical contribution to the development of domestic mastology.

Keywords: the history of medicine, mastology, mastology service.

Introduction: 2020 is the anniversary year for the Kazakh Institute of Oncology and Radiology (KazIOR). 60 years is the lifetime of one person, so it is time to summarize the results, define goals and objectives, identify prospects for development. However, before we talk about the future, it is wise to remember how it started.

The history of the formation of breast care service in Kazakhstan is closely linked to the life of the Kazakh scientist, Doctor of Medical Sciences, professor, Honored Worker of the Republic of Kazakhstan (RK), Academician of the International Academy of Informatization, a Corresponding Fellow of the Academy of Medical Sciences of the RK, the first chief mastologist of the RK, Asker Esenkulovich Esenkulov (Figure 1).



Figure 1 – Asker Esenkulovich Esenkulov (1941-2017)

Asker Esenkulovich was born on 28 August 1941, in the Zhambyl region. He graduated from high school with honors, and in 1958 entered the medical faculty of the Alma-Ata State Medical Institute (today – Asfendiyarov Kazakh National Medical University, KazNMU). He graduated with honors in 1964 and was directed to KazIOR, where he worked as an intern-researcher (1964-1966), junior research (1966-1968), senior researcher (1968-1975) up to the head of the clinical department of hormone prophylaxis and hormone therapy of tumors (1970-1975) [1].

During that period, he got interested in oncology, which he further developed during his entire life. Over many years, A.E. Esenkulov focused on studying etiopathogenesis, clinical, epidemiological, immune-endocrinological features of the emergence and spread of breast tumors in Kazakhstan, the development of methods for early detection, prevention, treatment, and rehabilitation of patients with breast diseases. He established certain regional, ethnic features of the hypothalamic-pituitary system of women in Kazakhstan and identified four clinical and pathogenetic forms of breast cancer (BC). In particular, according to his studies, Asian women develop paranephric BC 1.3 times more often and involutive BC – 2.2 times less often than Caucasian women [2-3]. Activation of cellular oncogenes or suppressor genes was found to be the cornerstone of cell malignization. His clinical and experimental results were summarized and published in the monograph "Clinical and pathogenetic features of breast cancer in Kazakhstan and immune-endocrinological relationships" [4].

For the first time, they started talking about mastology as a section of clinical medicine in Kazakhstan in 1988. Prof. A.E. Esenkulov headed the first Republican Breast Center established that year by order of the Ministry of Health of the RK on the basis of the Almaty city oncological dispensary. Today, it serves each year 200-300 patients with BC and 700-800 patients with precancerous diseases. More than 10,000 women with various breast pathologies have been consulted. The center develops various BC surgery techniques [5-8].

In 1995, teaching mastology was started at the Oncology Department of KazNMU (1995-1998), and in 1999 deployed the Breast Clinic at KazNMU. The new specialty "doctor-mastologist" was approved in Kazakhstan by the Orders of the Ministry of Health of the RK No. 94, No. 375 of 1995. Since then, KazNMU has started training and retraining of mastologists. Prof. A.E. Esenkulov has been the editor in chief of the new educative journal "Mastology." During the 14 years of existence, the Breast Center has published 10 monographs, five textbooks, four teaching aids, four guidelines and procedures, five health education brochures,

more than 250 scientific papers, a collection of papers and abstracts; trained 20 mastologists, five postgraduates (one doctoral and four candidate's theses were defended), and four clinical residents. Educational activities were carried out on the basis of the Breast Center, which served as a clinical base for training and retraining of doctors of various specialties since the Center students included 5-6-year medical students, interns, and medical residents of KazNMU and the Kazakh-Russian Medical University.

Prof. Esenkulov initiated and participated in establishing mastology departments in Almaty, Shymkent, Karaganda, and Kokshetau. The first scientific-practical conference of mastologists of the RK held in Shchuchinsk in 1999 has established the Association of mastologists of the RK chaired by Prof. Esenkulov. Similar conferences were held in Almaty (2000, 2002) [9].

Prof. Esenkulov's achievements were highly appreciated by the scientific and medical community of the RK. In 1994, he was elected an academician of the International Academy of Informatization, a Corresponding Fellow of the Academy of Medical Sciences of the RK, the chief mastologist of the Healthcare Agency of Republic of Kazakhstan (1995); was awarded the title "Honored Worker of the RK," the Order "Veteran of Labor," "Excellence in Healthcare of the RK," numerous diplomas of the government, Ministry of Health of the RK, and KazNMU.

Conclusions: Data analysis and synthesis led to the conclusion that the scientific research of Prof. Esenkulov has determined the prospects for the development of mastology in the RK for decades to come. He has studied various issues of epidemiology, pathogenesis, features of the clinical course, ethnic patterns, algorithms for diagnostics and treatment of precancerous diseases and breast cancer in

Kazakhstan. The textbooks and teaching aids on mastology published by Prof. Esenkulov in Russian and Kazakh languages are still the only reference book for students of medical universities of the RK. His students respect their teacher's best traditions and strive to pass them on to the younger generation of doctors.

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ТҰЖЫРЫМ

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Қазақстандағы маммологиялық қызметтің даму тарихы туралы

Қазақстандық онкомаммологияның қазіргі жағдайы әртүрлі кезеңдердегі ғылыми жетістіктердің нәтижесі болып табылады және болашақ онколог-мамандар үшін белгілі бір қызығушылық тудырады. Мақалада Қазақстандағы маммологиялық қызметтің қалыптасуы мен дамуының негізгі кезеңдері келтірілген. Қазақстандық ғалым, медицина ғылымдарының докторы, профессор, ҚР еңбек сіңірген қайраткері Әскер Есенқұлұлы Есенқұлұловтың өмірбаяндық деректері және оның отандық маммологияның дамуына қосқан ғылыми-практикалық үлесі қысқаша баяндалады.

Түйінді сөздер: медицина тарихы, маммология, маммологиялық қызмет.

АННОТАЦИЯ

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К истории развития маммологической службы в Казахстане

Современное состояние казахстанской онкомаммологии является результатом научных достижений на различных этапах и представляет определенный интерес для будущих специалистов-онкологов. В статье приводятся основные этапы становления и развития маммологической службы в Казахстане. Кратко излагаются автобиографические данные казахстанского ученого, доктора медицинских наук, профессора, заслуженного деятеля РК, академика МАИ Аскера Есенқұловича Есенқұлова и его научно-практический вклад в развитие отечественной маммологии.

Ключевые слова: история медицины, маммология, маммологическая служба.