

癌幹細胞に関する最近の知見とその概念に基づいた癌治療戦略

阿部 成宏, 三浦 雅彦

A TREATMENT STRATEGY BASED ON RECENT ADVANCES IN
CANCER STEM CELL RESEARCH

Shigehiro ABE, Masahiko MIURA

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Abstract: It is a widely held view that there are self-renewing and multipotent stem cells in most adult tissues and organs and that these cells play a pivotal role in repairing tissue damage. Evidence is rapidly accumulating that a small number of cancer stem cells with similar properties also exist in tumor tissues that mostly consist of non-cancer stem cells, and that the cancer stem cells in turn enable tumor formation. Such cancer stem cells are reported to have characteristic phenotypes, including tumorigenesis, multi-drug resistance, and radioresistance. The cancer stem cell model thus predicts that only the eradication of cancer stem cells, considered responsible for recurrence, will lead to the cure of cancer, implying the importance of a treatment strategy targeting cancer stem cells. Interestingly, the strategies for radiosensitization developed in the radiation oncology field are likely to be closely associated with generating dysfunction in cancer stem cells and niches. Here, we review recent advances in cancer stem cell research, including identification and isolation, and discuss the significance of cancer stem cells as treatment targets.

Key words: Stem cells, Cancer stem cells, Self-renewal, Niche, Radioresistant, Stem cell markers

放射線治療外来初診患者に対する医療面接上の問題点と課題

広田 佐栄子, 久保田 智之, 清水 雅史

COMMUNICATION DURING THE FIRST CONSULTATION IN THE RADIATION-ONCOLOGY DEPARTMENT: ARE WE CORRECTLY ASSESSING THE PATIENTS' UNDERSTANDING AND PREFERENCES FOR INFORMATION?

Saeko HIROTA, Satoshi KUBOTA, Tadafumi SHIMIZU

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Abstract: Building a better patient-physician relationship is an essential component of patient-centered medicine. From this perspective, many studies have been conducted and many interventions or guidelines have been advocated. However, among radiation-oncology departments, an emphasis on communication-skills or patient' preferences has not been given proper attention. We analyzed 227 consecutive patients who were fully informed about their cancer from their referring physicians and who were visiting the radiation-oncology department of our hospital for the first time. Although, they had been given written information regarding their cancer, only 40% had a clear understanding of the disease. Another quarter of the patients were misinformed. The most frequently asked questions about radiotherapy concerned adverse effects, followed by effects or outcomes, procedures, and influences on daily life or work. About 40% of the patients were actively seeking additional medical information. There was a weak but statistically significant correlation between a better understanding of the cancer and active seeking additional information. Radiation oncologists should be aware of these issues in their clinical practice to build a good patient-physician relationship resulting in better treatment outcomes.

Key words: Communication skills, Radiation-oncology department, Patient' preferences

第4回 JASTRO将来計画セミナー報告
JASTROの視点から考える
「文部科学省・がんプロフェッショナル養成プラン」
—All Japanとして、“がんプロ”実施5年間でどのように取り組み、
如何に活用できるか?—

佐々木 良平^{*1}, 沼崎 穂高^{*2}, 西尾 禎治^{*3}, 福田 晴行^{*4}, 芦野 靖夫^{*5},
大西 洋^{*6}, 中村 和正^{*7}, 永田 靖^{*8}, 手島 昭樹^{*2}
(日本放射線腫瘍学会将来計画委員会/第4回日本放射線腫瘍学会将来計画セミナー事務局)

A REPORT OF THE 4TH JASTRO FUTURE PLANNING SEMINAR IN TOKYO
—CANCER PROFESSIONAL TRAINING PLAN BY THE MINISTRY OF EDUCATION,
CULTURE, SPORTS, SCIENCE, AND TECHNOLOGY JAPAN—

Ryohei SASAKI^{*1}, Hodaka NUMASAKI^{*2}, Teiji NISHIO^{*3}, Haruyuki FUKUDA^{*4}, Yasuo ASHINO^{*5},
Hiroshi ONISHI^{*6}, Katsumasa NAKAMURA^{*7}, Yasushi NAGATA^{*8}, Teruki TESHIMA^{*2}

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Abstract: The 4th JASTRO Future Planning Seminar was held in Tokyo on March 8, 2008. In the meeting, the approved plans for the Professional Training Plan for Cancer by the Ministry of Education, Culture, Sports, Science, and Technology, Japan, were introduced and discussed. Questionnaires on the contents of each plan, such as numbers/positions of students/ instructors, difficulty, problems, and opinions, were introduced and widely assessed. From the investigation, the small number of instructors who are medical physicists was identified as the most important problem for the future in the field of radiation oncology in Japan.

Key words: JASTRO, Cancer professional training plan, Radiation oncology, Medical physics

^{*1} 神戸大学大学院医学系研究科内科学系講座 放射線医学分野 放射線腫瘍学部門 (〒650-0017 神戸市中央区楠町7-5-2) (Division of Radiation Oncology, Kobe University Graduate School of Medicine) (7-5-2, Kusunokicho, Chuo-ku, Kobe 650-0017, JAPAN), ^{*2} 大阪大学大学院医学系研究科医用物理学講座 (Department of Medical Physics and Engineering, Osaka University Graduate School of Medicine), ^{*3} 国立がんセンター東病院臨床開発センター 粒子線医学開発部粒子線生物学室 (Medical Physics, Particle Therapy Division, Research Center for Innovative Oncology, National Cancer Center, Kashiwa), ^{*4} 大阪府立呼吸器・アレルギー医療センター 放射線科 (Department of Radiology, Osaka Prefectural Medical Center for Respiratory and Allergic Diseases), ^{*5} シー・エム・エス・ジャパン(株) (CMS Japan), ^{*6} 山梨大学医学部放射線医学教室 (Department of Radiology, Yamanashi University), ^{*7} 福岡大学医学部放射線医学教室 (Department of Radiology, School of Medicine, Fukuoka University), ^{*8} 広島大学大学院医歯薬学総合研究科創生医科学専攻 先進医療開発科学講座 広島大学病院放射線治療部 (Division of Radiation Oncology, Hiroshima University Hospital)

臨床医およびJASTROデータベース委員会の立場から

寺原 敦朗^{*1}, 沼崎 穂高^{*2}

**CURRENT STATUS AND PROBLEMS OF IHE-RO FROM THE POINT OF VIEW OF
A CLINICIAN AND JASTRO DATABASE COMMITTEE**

Atsuro TERAHARA^{*1}, Hodaka NUMASAKI^{*2}

Abstract: There are many issues regarding the input, management, and operation of information related to radiotherapy. In our department of radiation oncology, we reconstructed an old department database (DB) system, which had been utilized for years. The reconstructed DB was intended to contain sufficient information for JASTRO structural surveys and other data requests by adding data items included in the ROGAD (Radiation Oncology Greater Area Database) and omitting tables and items that were not appropriate for the current situation. However, we could not extract sufficient data for JASTRO structural surveys because of the lack of data and incorrect input methods. The new RIS (radiology information system) installed in our department requires that physicians enter the same information as in the department DB. Information sharing between systems in our hospital does not function well, and the workload of medical staff in daily clinical practice is increasing. It is difficult for us to maintain high levels of motivation for data entry in this situation. It is necessary to establish an information system, the Japanese National Cancer Database (JNCDB), that can collect nationwide data for cancer treatment and build cooperation among cancer registration systems and cancer database systems through the activities of the IHE-RO and JASTRO database committee.

Key words: IHE-RO, JASTRO Database Committee, National Cancer Database, Cancer registration

^{*1} 東京大学医学部附属病院放射線科(〒113-8655 東京都文京区本郷7-3-1) (Department of Radiology, University of Tokyo Hospital) (7-3-1, Hongo, Bunkyo-ku, Tokyo 113-8655, JAPAN), ^{*2} 大阪大学大学院医学系研究科医用物理工学講座 (Department of Medical Physics and Engineering, Osaka University Graduate School of Medicine)