放射線治療科 研究業績 (2017年)

原著論文

- Doi H , Tanooka M , Ishida T , Moridera K , Ichimiya K , Tarutani K , Kitajima K , Fujiwara M , Kishimoto H , Kamikonya N
 - 2 Utility of intraoral stents in external beam radiotherapy for head and neck cancer
 - 3 Reports of Practical Oncology & Radiotherapy
 - **4** 2017
 - (5) 22(4)
 - **6**) 310-318
 - This study aimed to assess the utility and stability of intraoral stent during intensity-modulated radiation therapy (IMRT).
 - The benefits of intraoral stents in radiotherapy are unclear. We analyzed 386 setup errors in 12 patients who received IMRT for head and neck cancers without intraoral stents (intraoral stent [-]) and 183 setup errors in 6 patients who received IMRT with intraoral stents (intraoral stent [+]).
- 2 🕦 Doi H, Matsumoto S, Odawara S, Shikata T, Kitajima K, Tanooka M, Takada Y, Tsujimura T, Kamikonya N, Hirota S
 - 2 Pravastatin reduces radiation-induced damage in normal tissues
 - 3 Experimental and Therapeutic Medicine
 - **4** 2017
 - **⑤** 13(5)
 - **6** 1765-1772
 - Pravastatin is an inhibitor of 3-hydroxy-3-methyl- glutaryl-coenzyme A reductase that has been reported to have therapeutic
 - ② applications in a range of inflammatory conditions. The aim of the present study was to assess the radioprotective effects of pravastatin in an experimental animal model.
- Tanooka M, Doi H, Ishida T, Kitajima K, Wakayama T, Sakai T, Inoue H, Kotoura N, Kosaka K, Tarutani K, Fujiwara M, Kamikonya N

- 2 Usability of Deformable Image Registration for Adaptive Radiotherapy in Head and Neck Cancer and an Automatic Prediction of Replanning
- 3 International Journal of Medical Physics, Clinical Engineering and Radiation Oncology
- **4** 2017
- **⑤** 6(1)
- **6** 10-20

Deformable image registration (DIR) has been an important component in adaptive radiotherapy (ART). Our goal was to examine the accuracy of ART using the dice similarity coefficient (DSC) and to determine the optimal timing of replanning. A total of 22 patients who underwent volume modulated arc therapy (VMAT) for head and neck (H&N) cancers were prospectively analyzed.

- Witajima K, Doi H, Kuribayashi K, Hashimoto M, Tsuchitani T, Tanooka M, Fukushima K, Nakano T, Hasegawa S, Hirota S
 Prognostic value of pretreatment volume-based quantitative 18F-FDG PET/CT parameters in patients with malignant pleural mesothelioma
 - 3 European Journal of Radiology
 - **4** 2017
 - **⑤** 86(1)
 - **6** 176–183

To investigate the relationships between pretreatment volume-based quantitative 18F-fluorodeoxyglucose (FDG) positron

② emission tomography/computed tomography (PET/CT) parameters and overall survival (OS) in patients with malignant pleural mesothelioma (MPM).

学会発表

- K. Tarutani, H. Doi, M. Tanooka, T. Ishida, K. Kosaka, K. Ichimiya, K. Moridera, K. Kitajima, T. Yasuhiro, M. Fujiwara, H. Kishimoto, N. Kamikonya
 - 2 Intraoral stent reduces set-up errors in image guided radiotherapy for head and neck cancer patients
 - 3 Poster

- 4 The European Cancer Congress 2017
- (5) Amsterdam, Netherlands
- © 2017/1/29
- In each patient, dispersion and SD were significantly reduced in Z-axis by use of IOS. IOS can improve the precision of radiotherapy in head and neck cancer patients with reduction of random set-up errors during the course of radiotherapy.
- ² Tarutani, H. Doi, M. Tanooka, T. Ishida, K. Kosaka, K. Ichimiya, K. Moridera, K. Kitajima, T. Yasuhiro, M. Fujiwara, H. Kishimoto, N. Kamikonya
 - 2 Intraoral stent reduces set-up errors in image guided radiotherapy for head and neck cancer patients
 - ③ Oral
 - 4 The 5th International Symposium of Training Plan for Oncology Professionals
 - ⑤ Osaka
 - © 2017/3/3
 - ② In each patient, dispersion and SD were significantly reduced in Z-axis by use of IOS. IOS can improve the precision of radiotherapy in head and neck cancer patients with reduction of random set-up errors during the course of radiotherapy.
- 3 ① K. Kosaka, M. Tanooka, H. Doi, H. Inoue, K. Tarutani, H. Suzuki, Y. Takada, Fujiwara, H, N. Kamikonya, S. Hirota
 - Peasibility of estimating patient-specific dose verification results directly from linear accelerator log files in volumetric modulated arc therapy
 - ③ Oral
 - 4 The 5th International Symposium of Training Plan for Oncology Professionals
 - © Osaka
 - © 2017/3/3
 - The feasibility of estimating patient-specific dose verification results directly from linear accelerator (linac) log files has been investigated for prostate cancer patients who undergo volumetric modulated arc therapy (VMAT).
- 4 ① 土井啓至、田ノ岡征雄、石田敏久、一宮賢治、森寺邦康、樽谷和雄、冨士原将之、上野敬司、岸本裕充、上紺屋憲彦
 - ② Usability of intraoral stent; reduction of set-up error in external beam radiotherapy for head and neck cancer (頭頸部等車線治療における口腔装置の開発と有用性)

- ③ 口演
- ④ 第76回日本医学放射線学会総会
- ⑤ 横浜
- 6 2017/4/13
- ⑦ この研究の目的は、強度変調放射線療法(IMRT)中の口腔内ステントの有用性および安定性を評価することである。
- 5 1 土井啓至、田ノ岡征雄、石田敏久、森寺邦康、一宮賢治、樽谷和雄、中島浩樹、春井章吾、安藤新、上野敬司、北島一宏、若山司、 酒井敏行、高田康弘、冨士原将之、上紺屋憲彦、岸本裕充、廣田省三
 - ② 口腔装置(マウスピース)によるセットアップエラー低減の遡及的検証
 - ③ 口演
 - ④ 日本放射線腫瘍学会第30回高精度放射線外部照射部会学術大会
 - ⑤ 仙台
 - 6 2017/3/18
 - ⑦ IMRTにおいて、口腔装置(マウスピース)を用いたセットアップエラー低減を行った。