粒子線治療/治療方針

日本放射線腫瘍学会承認

2016/1/14

治療方針番号	C LU 1

疾患名

限局性肺癌

適応

切除不能または手術拒否臨床病期Ⅰ期およびcT2b-3N0原発性肺癌

病態

■□切除非適応 ■□化学療法不応 ■□再発性 □転移性 □他:

照射方法

1)末梢型, 1日1回 週4回照射法
・cT1-T2aN0, 総線量54.0-64.0Gy (RBE)/4回、50.0Gy (RBE)/1回
64-72.0Gy (RBE)/12回(線量制約で上記分割が困難な場合)
・cT2b-T3N0, 総線量64.0-72.0Gy (RBE)/12-16回
2)中枢型
・気管支壁外腫瘤形成型, 1日1回 週4回照射法, 総線量68.4Gy (RBE)/12回
・気管支壁内表層浸潤型, 1日1回週3回照射法, 総線量54.0Gy (RBE)/9回

併用療法

併用療法に関する制約なし

根拠となる論文, ガイドライン, 実績等

1) Miyamoto T, Baba M, Sugane T, et al. Carbon ion radiotherapy for stage I non-small cell lung cancer using a regimen of four fractions during 1 week. Journal of Thoracic Oncology. 2 : 916-926,2007
2)Takahashi W, Nakajima M, Yamamoto N, et al. Carbon ion radiotherapy in a hypofractionation regimen for stage I non-small cell lung cancer Journal of Radiation Research. 55: i26-i27,2014
3)Yamamoto N, Chapter 21 Lung Cancer Tsujii H, Kamada T, Shirai T, Node K, Tsuji H, Karasawa K eds. Carbon-Ion Radiotherapy. Principle, Practice, and Treatment Planning. Springer, 2014
4)Sugane T, Baba M, Imai R, et al. Carbon ion radiotherapy for elderly patients 80 years and older with stage I non-small cell lung cancer. Lung Cancer.64; 45-50, 2009.
5) Takahashi W, Nakajima M, Yamamoto N, et al: A prospective nonrandomized phase I/II study of carbon ion radiotherapy in a favorable subset of locally advanced non-small cell lung cancer. Cancer 121: 1321-1327, 2015
6)Iwata H, Demizu Y, Fujii O, et al: Long-term outcome of proton therapy and carbon-ion therapy for large (T2a-T2bN0M0) non-small cell lung cancer. Journal of Thorasic Oncology. 8 : 726-735, 2013
7)山本直敬,他.肺門型肺癌に対する重粒子線治療 気管支学23:712-720,2001
8)Yamamoto N, Nakajima M, Kurabe M, et al. A clinical trial of carbon-ion radiotherapy for the centrally located early stage lung cancer. 28th Annuual Meeting of JASTRO, 2015

備考