Does airway metallic stent limit additional treatments in patients with malignant airway stenosis?

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We read with great interest the paper of Iyoda et al. [1]. They retrospectively compared the data of 106 patients undergoing airway stenting with silicone stent (SS) ($n = 45$) and metallic stent (MS) ($n = 61$) for malignant airway stenosis within a period of 20 years. SS compared to MS group had higher survival rate ($p = 0.0173$), more additional treatments for thoracic malignancy ($p = 0.0007$), including chemoradiotherapy ($p = 0.0268$) and radiotherapy ($p = 0.0300$), and similar complication rates. On multivariate analysis, additional treatments and complication rates were favorable prognostic factors. SS compared to MS facilitated a greater degree of additional treatments, resulting in prolonged survival. The incompatibility of MS with radiotherapy was adduced as possible explanation.

We congratulate with the authors [1] for their work and fully agree that airway stenting has a key role in the management of malignant stenosis. Despite all, some points should be discussed before drawing definitive conclusions.

First, recent experimental and clinical studies [2, 3] showed that MS did not significantly affect radiation dose in the airway and surrounding tissues.

Second, despite the ideal stent does not exist, MS is usually selected in patients with advanced cancers, end stage or poor PS, because of (i) its easy procedure, (ii) no rigid bronchoscope and general anesthesia are required for the insertion, and (iii) it conforms to the twisting airway. Thus, MS over SS group could include higher rates of patients with poor PS, of non-naïve patients and/or of end stage patients. All these factors likely limited additional treatments [4] and

demonstrated short survival, independently from the characteristic of the stent.

Third, the immunotherapy may be an additional treatment in these patients who cannot tolerate standard CT and RT [5]. Obviously, the present paper cannot evaluate this issue being a retrospective analysis of 20 years of experience, and thus future studies should clarify the role of immunotherapy in these patients.

Declarations

Conflict of interest The authors disclose no conflict of interest and no funding for the present paper.

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