

Figure S1 Principle of CXR and DTS image acquisition. CXR, chest radiography; DTS, digital tomosynthesis.

Table S1 Diagnostic performance of CXR and DTS in visualizing silicone stent angulation (N=213)

Variables	CXR		DTS		P value
	n/N	% (95% CI)	n/N	% (95% CI)	
Stent angulation					
Sensitivity%	10/39	25.6 (13.0-42.1)	26/39	66.7 (49.8-80.9)	<0.001
Specificity%	173/174	99.4 (96.8-100.0)	167/174	96.0 (91.9-98.4)	0.035
Accuracy%	183/213	85.9 (80.5-90.3)	193/213	90.6 (85.9-94.2)	0.133
PPV%	10/11	90.9 (56.9-98.7)	26/33	78.8 (63.5-88.8)	0.373
NPV%	173/202	85.6 (93.2-87.8)	167/180	92.8 (85.9-94.2)	0.025

*, CXR and DTS images were evaluated using the bronchoscopic view as the reference, and all cases were evaluated as “Yes (Detected)” or “No (Not detected)”. CXR, chest radiography; DTS, digital tomosynthesis; CI, confidence interval; PPV, positive predictive value; NPV, negative predictive value.

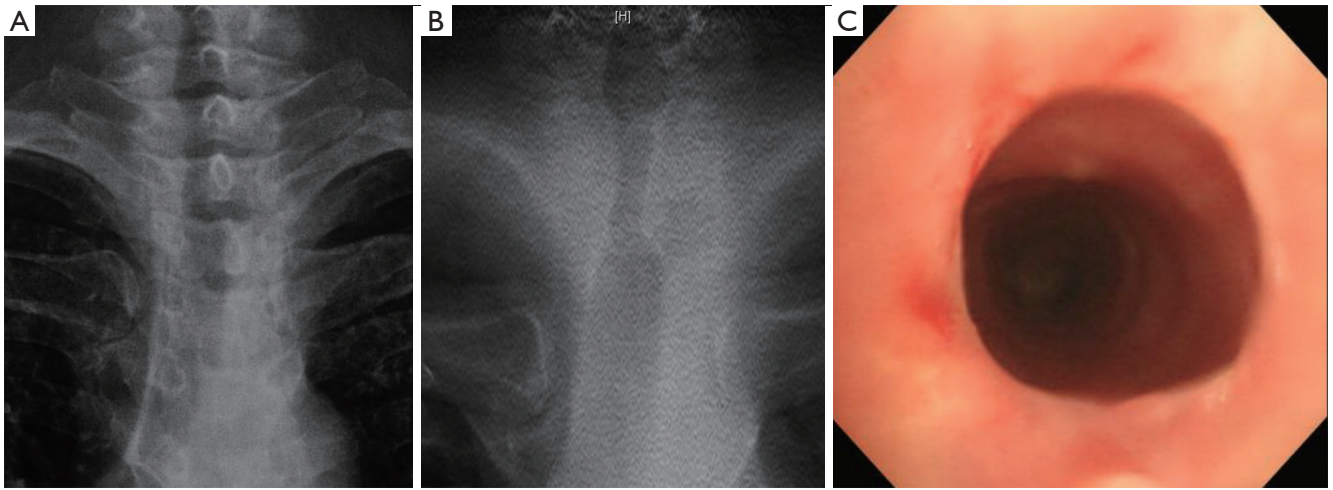


Figure S2 This is a case where the stent appears to be inserted into the trachea where the stent was previously present even though there is no actual airway stent. (A) Chest radiograph. (B) Digital tomosynthesis image. (C) The actual appearance in the bronchoscopic view.

Table S2 A 2×2 contingency table according to each evaluation item (N=213)

Detection in rigid bronchoscopy								
Presence of silicone stent								
Detection on CXR	Yes	No	Total	Detection on DTS	Yes	No	Total	
	Yes	119	0	119	Yes	155	1	156
	No	48	46	94	No	12	45	57
	Total	167	46	213	Total	167	46	213
Presence of silicone stent at trachea								
Detection on CXR	Yes	No	Total	Detection on DTS	Yes	No	Total	
	Yes	41	0	41	Yes	55	1	56
	No	23	147	170	No	9	146	155
	Total	64	147	211	Total	64	147	211
Presence of silicone stent at RMB & RBI								
Detection on CXR	Yes	No	Total	Detection on DTS	Yes	No	Total	
	Yes	10	0	10	Yes	21	0	21
	No	13	188	201	No	2	188	190
	Total	23	188	211	Total	23	188	211
Presence of silicone stent at LMB								
Detection on CXR	Yes	No	Total	Detection on DTS	Yes	No	Total	
	Yes	66	0	66	Yes	77	0	77
	No	12	133	145	No	1	133	134
	Total	78	133	211	Total	78	133	211
Stent migration								
Detection on CXR	Yes	No	Total	Detection on DTS	Yes	No	Total	
	Yes	13	1	14	Yes	24	5	29
	No	40	159	199	No	29	155	184
	Total	53	160	213	Total	53	160	213
Stent obstruction								
Detection on CXR	Yes	No	Total	Detection on DTS	Yes	No	Total	
	Yes	23	0	23	Yes	78	13	91
	No	98	92	190	No	43	79	122
	Total	121	92	213	Total	121	92	213
Stent angulation								
Detection on CXR	Yes	No	Total	Detection on DTS	Yes	No	Total	
	Yes	10	1	11	Yes	26	7	33
	No	29	173	202	No	13	167	180
	Total	39	174	213	Total	39	174	213

CXR, chest radiography; DTS, digital tomosynthesis; RMB, right main bronchus; RBI, right bronchus intermedius; LMB, left main bronchus.