

BURIED BUMPER SYNDROME (BBS) AS A COMPLICATION OF PERCUTANEOUS ENDOSCOPIC GASTROSTOMY (PEG) IN HEAD AND NECK CANCER (HNC) PATIENTS

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INTRODUCTION

PEG is a relatively simple and safe method of enteral access. BBS is an unusual and probably underdiagnosed PEG complication.

OBJECTIVES

Describe the frequency and clinical characteristics of BBS in PEG patients with HNC.

MATERIAL AND METHODS

From January 2000 to December 2012, the authors conducted a retrospective analysis of 27 patients diagnosed with BBS between 840 HNC patients submitted to PEG (Gauderer-Ponsky Pull technique) at the National Cancer Institute, Rio de Janeiro, Brazil. BBS was classified as early complication (partial, < 50% intramural and subtotal, >50% intramural), and late complication (total, 100% intramural).

RESULTS

Twenty seven patients (3.2%) were diagnosed with BBS. The interval between PEG and BBS ranged from 7 to 630 days (mean = 140.5 days). In 7 cases (25.9%) the diagnosis was made during the first 4 weeks after PEG. BBS was classified as partial in 9 cases (33.3%), subtotal in 11 cases (40.7%) and total in 7 cases (25.9%). All 27 patients were treated on an outpatient basis. Four cases of partial BBS were treated by tube replacement, and 5 by simple repositioning of the original tube. The subtotal BBS cases were treated by tube replacement (10) or removal and new PEG (1). In 5 cases of total BBS, a new PEG was done immediately after removal of the original tube; while in 2 cases a new PEG was done postoriously. There was no associated mortality.

Table 1 – Description and treatment used for the BBS patients

Case	Gender	Age	Tumor Location	Kit	BBS	Interval PEG-BBS (days)	Treatment
1	M	55	Larynx	PEG 24-Pull	Partial	630	Replacement
2	F	45	Larynx	Home-made	Partial	60	Replacement
3	M	46	Oral Cavity	PEG 24-Pull	Sub-total	90	Replacement
4	F	77	Larynx	MIC PEG 24	Total	150	Removal and delayed new PEG
5	F	78	Larynx	PEG 24-Pull	Total	180	Removal and delayed new PEG
6	M	69	Larynx	MIC PEG 24	Total	30	Removal and immediate new PEG
7	M	65	Larynx	MIC PEG 24	Partial	600	Replacement
8	M	45	Mandible	PEG 24-Pull	Partial	420	Repositioning
9	M	52	Oral Cavity	PEG 24 Pull	Partial	7	Repositioning
10	M	58	Larynx	MIC PEG 24	Sub total	528	Replacement
11	F	59	Pharynx	PEG 24-Pull	Sub-total	21	Replacement
12	F	47	Maxillary Sinus	PEG 24-Pull	Sub-total	102	Replacement
13	F	43	Maxillary Sinus	PEG 24-Pull	Partial	9	Repositioning
14	M	72	Larynx	PEG 24-Pull	Sub-total	23	Replacement
15	M	64	Oral Cavity	PEG 24-Pull	Sub-total	45	Replacement
16	M	64	Oral Cavity	PEG 24-Pull	Sub-total	12	Replacement
17	M	50	Oral Cavity	PEG 24-Pull	Partial	49	Repositioning
18	M	68	Larynx	PEG 24-Pull	Partial	19	Replacement
19	F	58	Oral Cavity	Button Boston	Sub-total	150	Replacement
20	F	43	Pharynx	EndoVive	Total	70	Removal and immediate new PEG
21	F	76	Cavum	EndoVive	Total	69	Removal and immediate new PEG
22	F	66	Pharynx	PEG 24-Pull	Sub-total	41	Replacement
23	F	62	Pharynx	PEG 24-Pull	Sub-total	30	Replacement
24	M	50	Pharynx	PEG 24-Pull	Total	154	Removal and immediate new PEG
25	F	79	Larynx	EndoVive	Partial	13	Repositioning
26	F	79	Larynx	EndoVive	Total	40	Removal and immediate new PEG
27	M	41	Pharynx	EndoVive	Sub-total	252	Removal and immediate new PEG

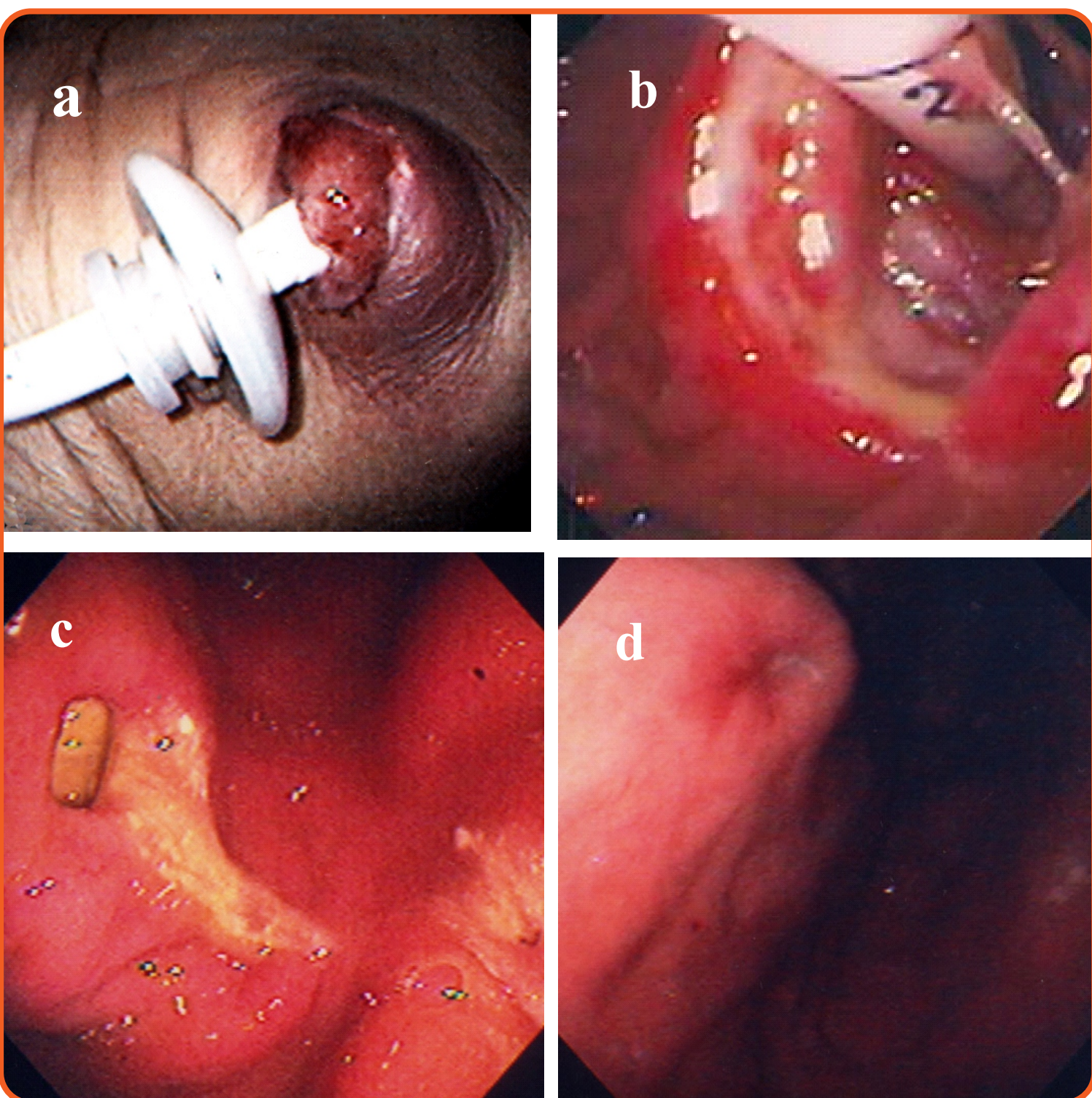


Fig. 1. Buried bumper syndrome (BBS). (a) External aspect; (b) partial BBS (1st Grade); (c) sub-total BBS (2nd Grade); (d) total BBS (3rd Grade).

CONCLUSION

BBS is an uncommon and usually late PEG complication. Most of our cases (74,1%) were detected at an early stage of intramural migration (partial or subtotal). Early BBS diagnosis may avoid serious infectious complications and may allow simple treatment (repositioning of the original tube or its withdrawal and replacement by a new one).