World J. Surg. 19, 828–835, 1995

WORLD
Journal of
SURGERY

Comparison of Different Treatments for Unresectable Esophageal Cancer

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Abstract. Many patients with esophageal cancer have advanced disease that is not amenable to curative treatment. For these individuals the relief of dysphagia is of utmost importance to the quality of their remaining survival time. This article reviews and compares the methods of palliation with focus on indications and contraindications, advantages as well as disadvantages of each technique, success rates, and complications. Tumor characteristics, the physician's experience, the institution's capabilities, cost, and patient preference will influence choice of palliation. Methods are often complementary rather than competitive.

The vast majority of patients with esophageal cancer present with locally advanced or metastatic disease that is considered incurable. For these individuals, the goal of treatment is the relief of dysphagia and odynophagia and the restoration of oral alimentation for the duration of the patient's life. Because survival is usually under six months, palliation should be accomplished quickly, conveniently, efficiently, and with low morbidity and mortality.

The methods of palliation (Table 1) are variable. The choice of the best means of palliation for a particular patient will depend not only upon each technique's advantages and disadvantages for the presenting tumor characteristics, but also upon the patient's preferences and performance status. It must be emphasized that palliation of esophageal cancer requires individualization of treatment. This article discusses and compares the various techniques of palliation and is meant to be a guide in treatment planning. One quickly realizes that the physician must have several available tools or options to adequately palliate this disease.

The focus of this article is on the truly unresectable patient. Although surgery is considered the time-honored approach to resectable disease, patients may be medically inoperable and still require palliation. With surgery alone yielding disappointing survival rates and the advent of multimodality therapy, several centers have adopted a nonsurgical approach except for very selected cases. Reports from such institutions will include patients with earlier stage disease and make comparison of palliative benefit difficult.

Very little will be said in the following sections regarding the technical aspects of the palliative method. Rather, the emphasis will be placed on indications and contraindications, advantages and disadvantages, complications, and results of each method. Patients presenting with the difficult problem of an esophagorespiratory fistula will be discussed separately. A review and summary of studies comparing different techniques will follow.

Surgery

It is usually difficult to justify surgical intervention in a group of patients with short life expectancy and commonly significant co-morbidities. Unfortunately, surgery often turns out to be palliative "after the fact." In this group of patients dysphagia-free relief is significant, but these patients do not belong to the advanced population that is the focus of this review. Palliative resection or exclusion via bypass surgery carries a prohibitively high risk of morbidity and mortality in the clearly unresectable patient. Segalin et al. [1] reported a study where the decision to perform palliative esophagectomy was made at the time of operation when complete resection was impossible. In a group of 156 patients, overall hospital mortality was 10% and 72 patients (46%) had postoperative complications. Several authors have reported mortality rates for bypass surgery that range from 20% to 34% [1–5]. An exception is the report by Mannell et al. [6] who noted a hospital mortality of 11% for 124 patients undergoing esophageal exclusion. He reported that 89% of the survivors could eat a normal diet and 82% continued to have complete and lasting relief of dysphagia. Despite the success of surgery in palliating dysphagia, experience supports the view that this is not a viable option for patients with advanced esophageal cancer.

External Beam Radiation Therapy

Radiation therapy (RT) has been considered and remains an important method of palliation. Dysphagia can be relieved in 50%–70% of patients [7–10]. Most authors have reported better palliation with higher doses of RT (> 45–50 Gy) [7, 11, 12]. Time-to-treatment effect averages 4–6 weeks. Complications, including severe esophagitis, stenosis, and fistula formation were reported in 30% of patients by Langer [8]. Late complications of tumor recurrence or dysphagia due to radiation fibrosis have been reported in 30%–50% of patients [7, 9, 12, 13]. A real advantage to RT is that it is truly noninvasive. However, patients must invest a considerable amount of time in treatment or travel. RT is not usually effective when the lumen is totally obstructed. It should also be noted that the majority of series have included predominantly squamous cell carcinoma of the esophagus.

Table 1. Methods of palliation of esophageal cancer.

Surgery
Resection
Bypass
Radiation
External beam
Brachytherapy
Chemoradiation
Dilation
Intubation
Plastic prosthesis
Expandable metal stent
Laser therapy
Bipolar electrocoagulation
Photodynamic therapy
Chemical injection

Brachytherapy

To directly effect intraluminal tumor causing dysphagia and shorten treatment time, brachytherapy is an attractive option. Fleischman et al. [14] reported on 10 patients with advanced esophageal cancer who underwent a short intensive course of intraluminal brachytherapy (a total of 20 Gy in 3 fractions given every other day using Cesium-137). Ninety percent of the patients had improvement in their dysphagia with an average response of 5.1 months. The only complication was mild to moderate esophagitis occurring in approximately 50% of patients one week after treatment. This same regimen was compared to high-dose-rate brachytherapy (single dose of 12.5 Gy using Iridium-192) with an increase in moderate to severe, but self-limited, esophagitis [15].

Brachytherapy has been combined with external radiation therapy (ERT) to increase local control [11, 16–19]. Pakisch et al. [16] reported use of this approach in 48 patients with unresectable local tumor or who were medically inoperable. Patients underwent high-dose-rate brachytherapy followed by ERT (35 patients received 50–60 Gy and 13 patients received 30 Gy). Of the 41 patients completing treatment, 29 (71%) returned to a normal diet. All patients receiving more than 50 Gy of ERT suffered mild to moderate esophagitis and late complications (esophageal ulcers, strictures) developed in 29%. Agrawal et al. [17] reported on 70 patients, 67 of whom received ERT (20–50 Gy) followed by brachytherapy. Swallowing was restored in 65 patients (92%) 4 weeks after treatment although half of the patients required late dilation for stricture. Among 46 patients undergoing ERT and brachytherapy reported by Petrovich et al. [11], 76% received moderate to good palliative benefit as compared to 52% with ERT alone. Caspers et al. [18] reported 35 patients undergoing ERT followed by low-dose-rate brachytherapy. At 6 weeks post-treatment, 90% of the group could eat solid food. Most patients were well palliated until 2–4 weeks prior to death (median survival 11 months). Severe esophagitis requiring hospitalization occurred in 14% of patients, and late complications developed in 17% of patients.

In summary, brachytherapy offers a method of direct attack on intraluminal tumor. Local control (equating to dysphagia relief) and complications of ulceration, stricture and fistula should be compared in a randomized trial of ERT alone versus ERT plus brachytherapy.

Chemoradiation

Chemoradiation has been used in the neoadjuvant setting in numerous single institution trials. In two randomized studies [21, 22] and in Coia's nonrandomized report [23], this modality has also been used alone with impressive survival figures. However, it is difficult to assess the palliative benefit of chemoradiation for advanced disease since the majority of studies include a mixture of Stage I–III patients. Coia et al. [23] reported separately the results in a palliative group of 33 patients. Of 30 patients experiencing dysphagia before treatment, 23 (77%) were dysphagia-free after chemoradiation, and 60% retained their ability to swallow until death or last follow-up. There was no difference in overall percentage of improvement or time to improvement between patients with squamous cell versus adenocarcinoma, but patients with distal thoracic tumors did significantly better than those with upper and middle thoracic lesions [24].

The toxicity of chemoradiation is significant and is increased over that of radiation alone [25]. Herskovic [21] reported a 64% rate of severe and life-threatening acute toxicity, and Coia [23] reported a 56% rate of moderate to severe acute toxicity. Mortality, however, is low (< 2%). Late toxicity does not seem to be increased. The treatment time must be considered lengthy for those patients with a life span under 6 months. The chance for better survival must be weighed very carefully against the opportunity for greater morbidity. At present it is the author's opinion that chemoradiation be considered only in good risk patients with locally advanced disease, preferably in a controlled study.

Dilatation

Dilatation can afford excellent relief of dysphagia with an overall complication rate of 2.5%–10% [26]. It has seldom been used alone because of the short duration of its effect, but it is an important initial step in many alternative palliative techniques. Aste et al. [27] reported on 38 unselected patients with inoperable malignant strictures who underwent dilation alone. The procedure failed in 15% secondary to inability to pass a guide wire. No benefit to dilation was observed in 31.5% of the patients. The mean duration of effect in those receiving benefit was 11.5 days. Lundell [28] reported good relief with dilation alone in 41 patients, but the procedure was repeated at intervals of about 4 weeks. Intubation was eventually performed in 22% of the group.

The three most common dilators used in the dilation of malignant strictures are the Maloney, Savary-Gilliard, and balloon-type dilators. Choice of a dilator depends upon the operator's preference and experience and upon tumor characteristics (location, length, degree of elasticity, and angulation) [29]. Short, soft, symmetrical stenoses are amenable to dilation with Maloney dilators, particularly if the lumen is at least 30 French (F). This mode of dilation is considered very safe [30]. Savary-Gilliard and balloon-type dilators are useful for tight, long, or asymmetric strictures. Dilation to at least 40 F is usually required to relieve dysphagia.

The advantages to dilation are its simplicity, availability, low complication rate, ability to be performed in the outpatient setting, low cost, and suitability for many tumors irrespective of site. For poor-risk patients who have an extremely short life-span and desire to be home and in some comfort, a trial of dilation should be considered.

Intubation—Plastic Prosthesis

Peroral intubation with a prosthesis is a very popular method of palliation for esophageal cancer worldwide. The tubes most frequently used have an internal diameter of 10–12 mm, external diameter of 14–17 mm, a proximal "funnel" design to anchor on the tumor and prevent caudal migration, and a distal flange or collar to prevent cephalad movement [31]. Advantages of this method of palliation include its simplicity, short hospitalization requirement, and immediate improvement in swallowing. Endoesophageal prostheses are especially useful for long asymmetric or tortuous strictures, tumors leading to predominantly extrinsic compression, esophagorespiratory fistulas, and as salvage therapy after other methods (RT, laser, etc.) have failed. A general contraindication to a prosthesis is tumor within 3 cm of the cricopharyngeus muscle secondary to a foreign-body sensation, possible tracheal compression, and potential migration into the hypopharynx. However, a tube with or without modification has been tolerated in many patients with cervical tumors [32–34]. A prerequisite to use of this palliation technique is that the tumor must be dilatable. It is advantageous if the tumor position does not require the prosthesis to traverse the gastroesophageal junction as reflux can be troublesome [35, 36]. The major disadvantage to intubation has been its high morbidity.

Early complications and their average incidence include perforation (6%), hemorrhage (3.5%), aspiration pneumonia (0–2%), and tube dislocation (15%) [20, 31]. Late complications include obstruction (9.5%), dislocation (8%), and pressure necrosis (3%). The most dangerous early complication is perforation, usually occurring during preliminary dilatation or tube placement. Completion of tube insertion with sealing of the perforation and conservative management is often successful treatment. The mortality rate after perforation has been reported at 27% [37] and 50% [38], respectively. Tube migration usually occurs if the prosthesis is not anchored properly (noncircumferential tumor, soft and necrotic lesions). Obstruction can occur from tumor overgrowth, food impaction, and angulation of the stricture causing the distal opening to impinge upon the esophageal or gastric wall. If late complications are considered, the morbidity rate of esophageal intubation may range from 22%–60% [35, 38, 39–41]. In a review of several series, hospital mortality averaged 8% [31].

Failure to intubate occurs in 0 to 15% of reported series, and a success rate of $> 90\%$ is reported in the majority [31]. Angorn noted that poor nutritional status, stricture length > 8 cm, bronchial invasion or fistulization, and severe esophageal axis disturbance adversely affected the results [42]. Although virtually every patient who is successfully intubated improves their swallowing, only 10%–50% of patients eat solids with 50%–70% restricted to a semi-solid diet [43].

Intubation—Expandable Metal Stents

In an attempt to reduce the complications of the standard prosthesis, a new class of expandable metallic stents has been developed. A variety of structures are available including (1) a Z grid in the Gianturco model (Wilson-Cook; Winston-Salem, NC, U.S.A.), (2) a knitted mesh of tantalum or various alloys such as cobalt iron (Schneider Wallstent; Schneider; Minneapolis, MN, U.S.A.) or nickel and titanium (Nitinol; Microvasive; Watertown, MA, U.S.A.), and (3) a spring in a nickel-titanium alloy (Esophacoil; InStent; Eden Prairie, MN, U.S.A.) [44]. The stent is compressed and restrained on a delivery device, and after positioning, expansion occurs by a variety of procedures.

Advantages of these stents are the potential for fewer complications and increased ease of insertion. Large-bore dilatation is not required, and therefore the risk of perforation is lessened. The lumen is larger (15–25 mm), and therefore food impaction should be less of a problem. The procedure is one-stage and can be performed under fluoroscopy in an endoscopy or radiology suite with intravenous sedation. If tumor growth occurs at the proximal or distal end, additional stents can be placed in an overlapping fashion [45]. A disadvantage to the metallic stents has been the potential for tumor ingrowth and inflammation with resulting reduction or blockage of the lumen [46]. This has been addressed by coating some stents with silicone [47, 48]. Changes in stent design are to be expected in an attempt to decrease the potential for migration (especially with coated stents), to increase the ease of insertion, and to reduce the problem of stent repositioning or extraction [49, 60]. A major drawback at present is the high price of these stents.

The self-expanding stents have been correctly placed in a very high percentage of patients with significant improvement in dysphagia to a solid diet [48, 61]. Knyrim et al. [52] reported a trial comparing the expandable metal stent (Schneider Wallstent) with the largest conventional plastic prosthesis (Wilson-Cook; Winston-Salem, NC, U.S.A.). Complications related to device placement and functioning were significantly less in the metal stent group.

With the potential for reduced morbidity, ease of placement, and better relief of symptoms, expandable metallic stents are worthy of further study. A multi-institutional national trial is now underway in the United States.

Laser Therapy

To destroy esophageal cancer, the neodymium: yttrium-aluminum-garnet (Nd:YAG) laser is usually applied in the noncontact mode using high (70–150 watts) power settings at a distance of 0.5–1 cm from the tumor. Initial dilation and the retrograde technique are favored to allow treatment to the entire tumor in one or two settings. For totally obstructing tumors that cannot safely be dilated, an antegrade approach is utilized in which 1–2 cm of tumor are treated at each session. Necrotic debris is cleared just prior to the next laser session.

Contact laser endoprobes are available and require much lower power settings (12–20 watts) to ablate tumor. The proported advantages to the contact technique are limitation of tissue damage and thereby decreased chances of esophageal perforation, tactile feedback to the surgeon to increase precision, and decreased production of laser plume [53]. In a comparative study of the contact and noncontact methods of technique, Redford et al. [54] concluded that the contact method offered no advantage in respect to number of treatment sessions, relief of dysphagia, or occurrence of complications. Specific situations that may lend themselves to the contact mode include a tight stenosis, total obstruction, and tumor overgrowth of a prosthesis or metallic stent.

Tumors that are relatively short (≤ 6 cm), nonangulated,

exophytic, noncircumferential, and in the mid- or distal esophagus are most amenable to laser ablation [55]. Although the laser can be utilized to reopen the esophageal lumen near the upper esophageal sphincter, the results are less successful. An esophagorespiratory fistula is a contraindication to this technique. Tumors that are predominantly submucosal and cause extrinsic luminal compression and angulated tumors are not suitable for safe laser therapy. Totally circumferential tumors are more vulnerable to post-laser strictures.

The technical success of laser therapy (luminal patency) must be distinguished from functional success [56]. Technical success has ranged from 90% to 100% in most series [31, 56–59], but functional success averages 75%–80% [56, 60, 61]. Patients with a better pretreatment performance status have a better functional result [60, 62]. Anorexia, general debility, and pain all affect functional success. Poor results have been reported with longer tumors [57, 62], but this has not been supported by others [63]. Tumors close to the upper esophageal sphincter are particularly difficult to palliate with success rates averaging 30%–50% [64, 65]. Although up to half of patients treated with laser may maintain luminal patency until death, the need for retreatment in many patients has prompted several endoscopists to reassess tumor status at regular 4–6 week intervals [31, 56].

The major early complications are perforation, fistula formation, and hemorrhage. In a review of several series (431 patients), the total perforation rate was 3%, bleeding rate was 1.4%, and fistula formation within 2 weeks of treatment was 2.3% [31]. An international inquiry was conducted by Ell and Demling and included 1359 patients [66]. Data from laser users who had treated more than 50 patients were analyzed. The complication rate was 4.1% and the mortality rate was 1%.

Clearly, an advantage to laser therapy is its high success rate with low complications. Dysphagia is palliated immediately, and the treatment can be repeated indefinitely (no maximum dosage) [67]. The procedure can be done in an outpatient setting with local anesthesia. A disadvantage is the high cost of equipment and consequently lack of easy access for some patients. Most patients do require retreatment sessions.

In an attempt to decrease the interval of time to repeat laser therapy and treat extraluminal disease, external RT and brachytherapy have been added [68, 69]. A prospective study has compared laser alone to laser plus afterloading with iridium-192 [70]. For patients with squamous cell carcinoma only, the interval from establishing luminal patency to the recurrence of dysphagia was twice as long in the group receiving brachytherapy.

Bicap Electrocoagulation

The bicap tumor probe uses the principles of bipolar electrocoagulation. Depth of coagulation effect (usually 1–2 mm) varies with generator power settings and appositional force [71]. Probes, shaped like the Eder-Puestow olive-shaped dilators, have different diameters (6, 9, 12, 15 mm). Most have a 360-degree treatment surface although a 180-degree treatment surface is available in the 15 mm probe. Probes are positioned over a guidewire in the tumor, and coagulation of strictures is carried out in overlapping fashion by both a prograde and retrograde technique.

The bicap probe is suitable for circumferential strictures that are predominantly submucosal and can be applied to long lesions and cervical tumors [31]. Asymmetric or noncircumferential strictures are best treated with the laser. Thickness and symmetry of the esophageal wall can best be evaluated by endoscopic ultrasonography. The wall should be at least 5 mm thick to avoid perforation [70].

The success rate in a small series has been greater than 80% [72]. Major complications in two series have been esophagorespiratory fistula (18%) and delayed hemorrhage (20%) [72, 73].

Advantages to the bicap probe include its low cost and easy portability. Treatment is fast, technically easy, and well tolerated. However, tumor characteristics dictate its safe use. It is therefore less versatile than the laser. Reported series have been small.

Photodynamic Therapy

The uniqueness of photodynamic therapy (PDT) is its selectivity. A chemical (photosensitizer) is given intravenously and selectively retained by the tumor. It is activated in the presence of molecular oxygen by light of a specific wave length and produces a cytotoxic agent (singlet oxygen) that leads to damaged microvasculature, tissue ischemia, and necrosis. A cylindrical diffuser which is incorporated into the end of a quartz fiber is placed through the biopsy channel of an endoscope and transmits light circumferentially to esophageal tissue. The diffuser can also be inserted directly into tumor for interstitial treatment. Endoscopy is repeated 2 days later to debride the treated area.

McCaughan et al. [74] reported on the use of PDT for palliation of esophageal cancer in 40 patients. At 1 month the mean luminal diameter had increased from 6 mm to 9 mm. Complications in this series were high and included stricture formation (15%), tracheoesophageal fistula (7.5%), and localized third-degree sunburn (2.5%). Results from ongoing multi-institutional phase III trials are awaited [56].

PDT may be particularly useful for cervical lesions [75] and can be applied to totally obstructing cancers [74]. PDT can be used repeatedly and in patients who have failed other modalities. At present, the cost is high. The full potential of PDT awaits further evaluation.

Chemical Injection

Sclerotherapy of esophageal cancer is a technically simple procedure and is available in any hospital with an active gastroenterology unit. In most cases, 100% ethanol in aliquots of 0.5 ml–1 ml is injected under direct vision into the tumor with a standard variceal injector assembly. Recanalization usually requires 1–3 treatment sessions at an interval of 3–7 days [76, 77]. Procedural complications are rare [76–78]. Retrosternal chest pain and low grade fever are common. Improvement is seen in 80%–100% of patients in reported series [76–78]. Relief from dysphagia persisted for approximately 30 days [76–78], and the procedure can be repeated. Advantages include easy availability, low cost, and short hospitalization. It can be applied to totally obstructing cancers. The best results occur with exophytic lesions, whereas firm and fibrotic tumors prove difficult to inject effectively [79]. It appears that treatments must be repeated at 4-week intervals.

Patients with Esophagorespiratory Fistulas

An esophagorespiratory fistula is present in about 5% of cases of esophageal cancer [78]. It results in early death 4–6 weeks after

Table 2. Comparison of palliative modalities for esophageal cancer.

	Surgical bypass	EBRT	Brachytherapy	Intubation		Laser	Bipolar electrocoagulation
				Plastic prosthesis	Expandable metal stent		
Technical success (%)	90–100	70	75–95	> 90	> 90	> 90	> 80
Functional success (%)	90–100	50–70	75–95	70	90	70–80	70–80
Time to best effect (weeks)	3	4–6	1	0	0	1	1
Procedure mortality (%)	20–34	0–2	0	8–10	0	1–2	0
Procedure morbidity							
Early (%)	30–40	10–20	10–20	15–25	< 10	4–7	10–20
Late (%)	—	30–50	30	20–25	10	< 5	10
Cost (low, mod, high)	High	Moderate	High	Low	Mod	Moderate/ high	Low

EBRT = external beam radiation therapy.

development as a consequence of ensuing pulmonary soilage. Options for patients include supportive care only, resection, esophageal exclusion and bypass, esophageal intubation, and radiation therapy. Resection is seldom a viable option although only 50% of these patients have distant metastases [80]. The role of RT has been controversial as many physicians have felt that it can only enlarge the communication. However, a collective series from Memorial Sloan-Kettering Cancer Center [81] revealed that only patients treated with RT or esophageal bypass had significantly prolonged survival when compared to other modalities. Others have reported that RT does not appear to worsen the fistula [82]. Patients undergoing bypass are frequently those with good performance status who have had an expeditious diagnosis and little pulmonary contamination. These patients can have high quality palliation for many months. It is more frequent to encounter patients with poor performance status who need quick and efficient palliation. Esophageal intubation is the simplest option [83]. Coated expandable stents have also successfully occluded esophagorespiratory fistulas [84].

Table 3. Laser versus intubation determined by tumor characteristics.

Tumor characteristic	Laser	Intubation
Location		
Cervical	+	—
Mid	+	+
Distal	±	+
Type		
Exophytic	+	+
Extrinsic	—	+
Length		
≦ 5 cm	+	±
> 5 cm	±	+
Degree of obstruction		
Circumferential	±	+
Partial	+	+
Presence of TEF	—	+

+, suitable; —, unsuitable or not favorable; ±, variable suitability; TEF, tracheoesophageal fistula.

Comparison of Palliative Techniques

There have been relatively few studies comparing the various palliative modalities. A true prospective randomized study is seldom possible since tumor characteristics may dictate a form of palliation (i.e., esophagorespiratory fistula). Table 2 is an attempt to compare success rate, morbidity, mortality, and cost of methods of palliation based on reported series cited in the previous sections.

The most frequent comparison of endoscopic means of palliating malignant dysphagia has been that of laser therapy versus intubation [85]. Retrospective comparisons by Buset [86] and Hahl [87] showed that adequate palliation (relief of dysphagia and restoration of oral alimentation) was achieved with a high success rate by both laser therapy and stent placement. However, the complication rate was higher in the intubated groups. Prospective studies have confirmed a higher early complication rate for stent placement [88, 89, 90]. Despite equal success in improving dysphagia, laser ablation results in restoration of a more normal diet than does intubation [88, 90, 91]. Quality of life assessment appears to be equal in the two methods of palliation [92, 93].

The addition of RT or brachytherapy to laser in order to decrease need for retreatment has not resulted in better swallowing when compared to intubation, and the increased treatment time must be considered a drawback [89, 94]. In similar fashion, adding radiotherapy or chemotherapy to intubation alone has not resulted in a better palliative effect [95].

Of great importance will be the continued development and refinement of expandable metallic stents and subsequent prospective comparison with laser therapy. As noted in Table 2, it is the potential for fewer complications that will improve the treatment profile of expandable stents.

Although helpful to compare laser and intubation, at present they remain complementary. Tumor characteristics are important determinants of choice for either technique (Table 3).

The bicap tumor probe has been compared for suitable tumors to Nd:YAG laser therapy [96] and intubation with an Atkinson tube [97]. Dysphagia relief was similar and complication rates comparable [98]. A prospective, randomized study comparing laser to polidocanol injection for inoperable esophageal malignancy showed equal amelioration of dysphagia. More patients in the laser group required retreatment. Laser therapy has also been compared to brachytherapy in a prospective randomized trial [99]. Treatment efficiency was equivalent, but need for retreatment was more common in the laser group.

In summary, each palliative modality has certain advantages and disadvantages and may be suited to particular tumor characteristics. The physician must consider his experience, his institution's capabilities, the technical and functional success of the

procedures, complications (early and late), procedural mortality, time in treatment and hospitalization requirements, cost, and finally, the patient's own desires. Techniques will probably continue to be complementary rather than competitive.

Résumé

La plupart des patients ayant un cancer de l'oesophage se présentent avec à un stade avancé de la maladie qui n'est plus compatible avec une thérapeutique à visée curatrice. Pour ces patients, il faut lutter contre la dysphagie pour améliorer la qualité de la survie. Cet article passe en revue et compare les méthodes palliatives en insistant sur les indications et les contre-indications, les avantages et les inconvénients de chaque technique, les taux de succès et des complications. Les caractéristiques de la tumeur, l'expérience du médecin, les possibilités locales, les coûts et le choix du patient entrent en jeu dans chaque cas. Les méthodes sont souvent plus complémentaires plutôt que compétitives.

Resumen

Muchos pacientes con cáncer esofágico presentan enfermedad avanzada que no es susceptible de tratamiento curativo. Para estos individuos el control de la disfagia es de gran importancia en cuanto a la calidad de la vida. El presente artículo revisa y compara los métodos de paliación con énfasis en las indicaciones y contraindicaciones, ventajas y desventajas de cada técnica, tasas de éxito y complicaciones. Las características del tumor, la experiencia del médico, la capacidad de la institución, el costo y la preferencia por parte del paciente influyen sobre la escogencia de la modalidad de paliación. Los métodos de paliación usualmente son complementarios más que competitivos.

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