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# CASE AND COMMENTARY: PEER-REVIEWED ARTICLE

How Should Surgeons Communicate About Palliative and Curative Intentions, Purposes, and Outcomes?

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#### **Abstract**

How surgeons describe procedures should be accurate, precise, and concordant with patients' values. By focusing on intention rather than realistic goals, terms like *curative* and *palliative*, when applied to high-stakes operations, such as a Whipple pancreaticoduodenectomy, can be confusing to patients. This case commentary argues that surgeons' language choices can influence patients' decisions and experiences.

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#### Case

LL is a 66-year-old patient with a pancreatic head adenocarcinoma. In consultation, Dr B recommended that LL undergo a Whipple pancreaticoduodenectomy and indicated that his "intention in doing this procedure is to cure your cancer." There were no postoperative complications, and LL completed adjuvant chemotherapy. But 18 months later, surveillance computed tomography imaging revealed a 3 cm mass in LL's right liver. Metastatic pancreatic cancer was confirmed by biopsy.

LL returned to see Dr B and asked why her operation wasn't curative. Dr B explained that most often pancreatic cancer recurs and that the operation was palliative.

# Commentary

In 1978, C. Gardner Child, former chairman of surgery at the University of Michigan, published a summary of 55 Whipple pancreaticoduodenectomies (PDs) he had performed from 1960 to 1978, mostly for malignancy. Child observed that the operation was "primarily a palliative surgical procedure." More than 40 years later, the same operation is still being referred to in many cases as palliative. However, the basis of the current designation is much different than what Child meant by *palliative*. Given advances in addressing major symptoms of malignancies treated by a PD, the role of true surgical palliation is significantly limited. Alliative Whipple is thus a description that should be used with precision, as imprecise usage can compromise patient autonomy, informed consent, and physician truthfulness.

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## PD as Palliative

Currently, PD is most commonly performed to treat periampullary malignancies of the head and neck of the pancreas, distal common bile duct, ampulla of Vater, and duodenum. These malignancies share common symptoms and an overall poor prognosis. Tumors in this region cause biliary obstruction in over 80% of patients, gastric outlet or duodenal obstruction in 10% to 25% of patients, and severe pain in 80% of patients. PD can effectively relieve these symptoms by removing the obstructing tumor and restoring biliary and gastric continuity directly with the proximal jejunum. Moreover, because these tumors characteristically infiltrate along nerves of the celiac plexus, resection might provide some pain relief. 10

Child held that, as long as there is no evidence of distant disease or tumor encasement of vital structure, PD should be performed on patients with a periampullary malignancy. Although he recognized that most patients would develop recurrent disease and die within a few months or a few years of surgery, he believed that "death from metastatic disease is more humane than death with a painful cancer in place." Thus, Child was able to accurately describe the operation he performed as *palliative* in that it relieved obstructive symptoms and pain. Recognizing that overall survival was poor, Child identified palliation as the primary justification for performing a PD.

Advances in endoscopic techniques during the 1990s made stent placement in the bile duct to relieve biliary obstruction a routine procedure. This was followed by endoscopic stenting of malignant obstructions in the pyloric channel and duodenum.<sup>4,6,7,8,9</sup> At the same time, percutaneous and endoscopic chemical splanchnicectomy and celiac plexus block were introduced in order to relieve pain and decrease the need for opioids.<sup>11,12,13</sup> Combined, these 3 minimally invasive procedures have largely supplanted PD in providing palliative benefit, except in limited situations.<sup>4</sup> Thus, indications and contraindications justifying PD have shifted from improving symptoms to improving survival.<sup>2,10,14,15,16</sup>

#### **Misnomers**

Despite advances in surgery, neoadjuvant and adjuvant chemotherapy, and radiation therapy, survival after PD for periampullary malignancies remains dismal.<sup>5</sup> Most of the uncertainty about PD for periampullary malignancies, particularly for pancreatic cancer, involves preoperative predictions about which patients are likely to experience long-term postsurgical survival (ie, 5 years or more).<sup>17</sup> The only current justification for most PDs is the prospect of long-term survival, so the operation is performed by a surgeon with *curative* intention. If it becomes clear that the surgeon's intention was not realized, either because of residual microscopic or macroscopic disease found at the cut margin of the pancreas or actual cancer recurrence before the 5-year mark and often within the first 2 years after surgery, the operation is described post hoc as palliative.<sup>2,10,14,15,16</sup> The term *palliative Whipple* therefore evolved as a post hoc description of a curative surgery for which the original curative purpose was unrealized.<sup>2,10,14,15,16</sup>

## Language

The language physicians use to communicate with patients is clinically and ethically relevant, <sup>18</sup> so ambiguous language should be eliminated when describing the Whipple procedure or any other intervention. Confusion generated by linguistic ambiguity can undermine patients' self-determination and patients' and surrogates' decision making, informed consent, or informed refusal.

The word *curative* should be reserved for procedures for which the probable outcome is long-term postsurgical survival. Thus, use of the term *curative* to describe PD misses the mark for informed consent because it focuses on a surgeon's intention rather than the expected outcome. What is further misleading is that PD does not lead to long-term survival in over 95% of cases. The American College of Surgeons specifically stipulates that potential benefits of a proposed operation should not be "exaggerate[d]." Describing PD as curative arguably violates this principle. *Cure* is also a value-laden term, particularly in cancer care, and patients often do not comprehend fully the details of their surgical informed consent. As such, imprecise use of the term can confuse patients about expected outcomes and undermine shared decision making.

Ad hoc use of the term *palliative Whipple* in the context of either unfavorable pathology or recurrence in less than 5 years is also misleading. Palliative surgery should be goal-directed with a reasonable expectation of symptom control.<sup>23</sup> While technically the operation may relieve biliary and gastroduodenal obstruction and potentially it might reduce pain, this is not the goal the patient and surgeon set out to achieve. The disconnect between goals and outcomes is particularly evident when preoperatively the patient is either asymptomatic or has had their symptoms effectively controlled endoscopically.<sup>20</sup> Even if the patient were symptomatic at the time of surgery, in most cases the patient's symptoms could have been effectively addressed either endoscopically or through a biliary or gastroduodenal bypass—procedures that are truly palliative—without requiring a PD.<sup>6,7,8,9</sup> This is not to say that the term *palliative Whipple* is oxymoronic. There are instances, such as intractable bleeding, in which the only way to relieve a patient's symptoms is to perform a PD.<sup>14</sup> In these instances, a PD is performed to achieve a reasonable goal, palliation, and the term *palliative Whipple* accurately describes the procedure.

In placing primacy on cure when describing PD, surgeons do not fully consider other benefits the operation is more likely to confer (ie, prolonged survival and improved quality of life). Using the term *curative* assumes the operation is all or nothing and that patients would refuse the operation if its benefit were limited to prolonged survival or improved quality of life. This narrow perspective unjustifiably presumes that patients would not value noncurative outcomes and ostensibly overlooks patient autonomy and patient-centered values and outcomes.<sup>22,24,25</sup> Yet this criticism does not imply that surgeons act maliciously when communicating with patients or that surgeons should stop offering PD to eligible patients. Most surgeons performing PDs take seriously their duty to inform patients about risks and benefits but also value "optimistic honesty"<sup>26</sup> by focusing on the positive aspects of a planned PD to the exclusion of negative aspects.<sup>26</sup> While surgeons might intend to give a patient hope, this intention does not justify the use of inaccurate, ambiguous, and misleading terms. Truth and optimism need not be at odds.

In sum, I recommend abandoning the ambiguous terms *curative* and *palliative* to describe PD. Patients should be informed of predictable outcomes and realistic goals of PD. In personalized medicine, clinical and multiomic tumor data can aid surgeons in more accurately predicting the benefits that PD might offer individual patients,<sup>27,28</sup> which they can then communicate to patients and use to facilitate informed decision making about PD based on outcomes rather than intentions. Surgeons who alter the language they use to inform patients during consent discussions might not influence poor prognoses for patients with periampullary malignancies, but they will likely improve honest communication, more fully informed consent, and patient-centered care.

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The author(s) had no conflicts of interest to disclose.

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