



Evolution of Neck Dissection for Improved Functional Outcome

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Abstract. Neck dissection plays a crucial role in the management of metastatic neck disease. Until recently, radical neck dissection has been the standard treatment for malignant cervical adenopathy irrespective of the nodal staging. However, in recent years, there has been a trend toward the development of more conservative operations, wherein certain nonlymphatic structures and lymph node groups can be selectively preserved. Radical neck dissection still remains the surgical standard against which various modifications must be compared. The need to perform more conservative surgery comes from the realization that the radical operation is attended by significant postoperative morbidity, and that some of the structures removed in the course of this operation can actually be preserved without any compromise in oncologic safety. The purpose of this article is to discuss the evolution of conservation surgery in the management of metastatic neck disease, define the clinical applications of various types of neck dissection, and evaluate the implications of these conservation approaches on preservation of function.

Metastatic dissemination into the lymph nodes of the neck occurs frequently in cancers of the upper aerodigestive tract. Of the patients who succumb to these cancers, most die as a result of uncontrolled disease in the neck. The term *neck dissection* refers to a surgical procedure in which the fibrofatty soft tissue content of the neck is excised to remove the lymph nodes contained therein. The purpose of this operation is to extirpate metastatic cancer residing within these lymph nodes.

Indications

Neck dissection is most commonly employed in the management of cancers of the upper aerodigestive tract; less frequently, it is employed in the treatment of malignancies of the skin of the head and neck area, the thyroid, and the salivary glands. When performed for removal of clinically palpable metastatic nodes (N+ necks), it is referred to as *therapeutic neck dissection*.

In patients with clinically negative (N0) necks, the operation may be carried out prophylactically to remove any microscopic nodal deposits of cancer. The decision to perform a prophylactic or elective neck dissection in a patient with a N0 neck is based on an esti-

mation of risk that the primary tumor in that patient has already metastasized. A thorough knowledge of the behavior of various types of cancers is necessary in estimating such risk. The propensity for nodal metastasis has been found to be related to various attributes of the primary tumor—e.g., the location, size, depth, differentiation, histologic characteristics such as vascular or perineural invasion. Tumors of the tongue, floor of mouth, nasopharynx, oropharynx, hypopharynx, and supraglottic larynx, for example, have a particularly high incidence of nodal metastasis. In contrast, tumors of the buccal mucosa, lip, paranasal sinuses, and glottic larynx disseminate much less frequently. T staging, which is an index of the mucosal spread of the primary lesion, is useful in predicting neck metastasis in most situations. In addition, depth of invasion, not considered in the T classification, has been shown to be an important predictor of neck metastasis, particularly with cancers of the oral cavity. It has been a convention to electively treat the neck if, based upon these factors, the likelihood of occult neck metastasis is estimated to exceed 20%. It must be remembered, however, that this is not necessarily an indication for neck dissection; the neck may be treated equally effectively with elective neck irradiation, particularly if the primary tumor is to be treated with radiotherapy [1].

Classification of Cervical Lymph Nodes

Lymphatic drainage from the mucosa and other tissues of the head and neck is directed to the fibroadipose tissue that lies between the investing layer of the deep fascia superficially, and the visceral and prevertebral layers underneath. The cervical lymph nodes are housed within these layers. In this space, these lymph nodes tend to be aggregated around certain neural and vascular structures—e.g., the internal jugular vein, spinal accessory nerve, and transverse cervical artery. In his study of lymphatic drainage of this area using the technique of lymphography, Fisch et al. [2] were able to improve upon the anatomical classification proposed by Rouviere. Fisch classified these lymph nodes into five categories: junctional, jugular, spinal, supraclavicular, and retroauricular. However, the nomenclature in popular use today comes from the Memorial Sloan-Kettering Cancer Center. This classification was used to describe

the patterns of metastatic dissemination seen in over 1000 patients treated at this hospital with radical neck dissection [3]. Lymph nodes in the neck were grouped into levels I through V, corresponding with submandibular and submental (level I); upper, middle, and lower jugular (levels II, III, and IV); and the posterior triangle nodes (level V).

The boundaries of level I are the mandibular margin superiorly, the posterior belly of the digastric muscle posteriorly, and the anterior belly of the same muscle on the contralateral side anteriorly. This level may be divided into levels Ia, referring to the nodes in the submental triangle, and Ib, referring to the submandibular triangle nodes. Closely related, though not strictly a part of this group of nodes, are the perifacial nodes, related to the facial vessels above the mandibular margin, and the buccinator nodes, which may become involved with metastasis from tumors in the buccal mucosa, nose, and soft tissues of the cheek and the lips.

Level II lymph nodes are related to the upper third of the jugular vein: the portion above the carotid bifurcation or the hyoid bone. The spinal accessory nerve, which travels obliquely across this area, has been used as a landmark to subdivide this group into IIb, the portion above and behind the nerve, and IIa, the part that lies anteroinferiorly and closer to the internal jugular vein.

Level III nodes are located between the carotid bifurcation superiorly and the omohyoid muscle, as it crosses the internal jugular vein, inferiorly. Level IV refers to the group of nodes related to the lower third of the jugular vein. These are located deep to the sternal (often referred to as IVa) and the clavicular (IVb) heads of the sternomastoid muscle.

Level V is a collective term for all the lymph nodes—spinal accessory, transverse cervical and supraclavicular—located in the posterior triangle of the neck.

The anterior or central compartment of the neck, located between the carotid arteries of the two sides, is rich in lymphatics that drain the thyroid gland, subglottic larynx, cervical trachea, the hypopharynx, and the cervical esophagus. Lymph nodes in this compartment are located in the tracheo-esophageal groove (paratracheal nodes), in front of the trachea (pretracheal nodes), around the thyroid gland (perithyroidal nodes), and on the cricothyroid membrane (precricoid or Delphian node). Lymph nodes in the central compartment are not routinely excised in radical neck dissection; most commonly, their removal is performed during the surgery for thyroid, laryngeal, and hypopharyngeal cancer. This group of nodes is now referred to as level VI.

Classification of Neck Dissections

For a long time radical neck dissection remained the standard surgical operation for treating metastatic neck disease. It is, however, invariably associated with the sequelae of shoulder syndrome and cosmetic disfigurement, arising from the sacrifice of the accessory nerve and the sternomastoid muscle. Excision of the nerves of the cervical plexus results in sensory deficits on the side of the neck and lower face and painful neuromas that may be a source of considerable long-term disability for the rest of the patient's life. Removal of the internal jugular vein on both sides is associated with a prohibitively high incidence of increased intracranial pressure and visual loss. These untoward sequelae have prompted efforts to develop modifications of the radical operation so as to reduce morbidity. The development of a variety of different approaches to surgical management of malignant cervical lymphadenopathy has

Table 1. American Academy of Otolaryngology–Head and Neck Surgery classification of neck dissection.

Radical neck dissection (RND)
Modified radical neck dissection (MRND)
Selective neck dissection (SND)
Supraomohyoid type (SOND)
Lateral type (LND)
Posterolateral type
Anterior compartment type
Extended radical neck dissection

Developed by The Committee for Head and Neck Surgery and Oncology, American Academy of Otolaryngology–Head and Neck Surgery [4].

led to a need for revisions and standardization in terminology. The classification proposed by the Committee of Head and Neck Surgery and Oncology sponsored by the American Academy of Otolaryngology/Head and Neck Surgery has now become widely accepted [4, 5]. It is based on the rationale that (1) radical neck dissection is the standard basic procedure for cervical lymphadenectomy, and all other procedures represent one or more modifications of this procedure; (2) when modification of the radical neck dissection involves preservation of one or more nonlymphatic structures, the procedure is termed a *modified radical neck dissection*; (3) when the modification involves one or more lymph node groups that are routinely removed in the radical neck dissection, the procedure is termed a *selective neck dissection*; (4) when the modification involves removal of additional lymph node groups or nonlymphatic structures relative to the radical neck dissection, the procedure is termed an *extended radical neck dissection* (Table 1).

Radical Neck Dissection

Originally described by George Crile in 1906, the radical neck dissection procedure (RND) is an en bloc clearance of all fibro fatty tissue from one side of the neck, including the lymph nodes from level I through V and lymph nodes surrounding the tail of the parotid gland, the spinal accessory nerve, the internal jugular vein, and the sternocleidomastoid muscle. It does not include the removal of the postauricular, suboccipital, perifacial, buccinator, retropharyngeal nodes or the central compartment nodes.

Earlier used for neck disease of any stage, from microscopic to bulky nodal disease, this procedure now finds its application limited to patients with advanced neck disease, with gross extracapsular spread to the spinal accessory nerve, sternomastoid muscle, and the internal jugular vein.

Modified Radical Neck Dissection

The operation for modified radical neck dissection (MRND) involves the removal of the same lymph node groups as the radical neck dissection (levels I through V), but it requires preservation of one or more of the three nonlymphatic structures: the spinal accessory nerve, the internal jugular vein, and the sternomastoid muscle.

Modified neck dissection is indicated in cases with clinically palpable metastatic neck disease. Conversion to the radical neck dissection becomes necessary when there is gross involvement of the nerve, vein, and muscle, although the involvement of all the three is unusual, except in very advanced (N3) disease.

Comprehensive neck dissection is a term that frequently appears in the literature. This refers to any type of neck dissection that in-

volves removal of lymph nodes from levels I through V, and corresponds therefore, to radical and modified radical neck dissections according to the Academy's classification.

Selective Neck Dissection

Supraomohyoid Neck Dissection. Selective removal of the level I, II, and III lymph nodes is called *supraomohyoid neck dissection* (SOND). The operation includes resection of soft tissue in the submental triangle; the submandibular triangle contents, including the submandibular gland; and the fibrofatty tissue along the internal jugular vein in the upper two levels. The dissected contents include the fascia covering the medial aspect of the sternomastoid muscle; the muscle itself is retracted laterally and preserved. These neck contents are peeled off from the internal jugular vein and from around the accessory nerve, thus sparing these structures.

Supraomohyoid neck dissection is indicated for the prophylactic treatment of occult neck disease in cancers known to metastasize to this group of nodes, i.e., cancers of the oral cavity. Application of this type of neck dissection to treat clinically positive nodes is controversial, and will be discussed later in this article. If this operation is performed for N+ disease, it may be prudent to include level IV in the dissection.

Lateral Neck Dissection. Selective removal of the soft tissues containing the level II, III, and IV lymph nodes along the internal jugular vein is called *lateral or anterolateral neck dissection* (LND). Spinal accessory nerve, sternomastoid muscle, and internal jugular vein are spared in this operation.

This operation is commonly performed for the prophylactic-treatment of occult disease in patients with primary cancers in the oropharynx, hypopharynx, or larynx. Its application in the N+ situation is still under investigation.

Both the supraomohyoid and the lateral neck dissections may need to be performed on both sides in patients whose primary tumors are located close to or across the midline. Cancers of the ventral tongue and the floor of the mouth, lower lip, and the supraglottic larynx are known to metastasize bilaterally.

Anterior Compartment Neck Dissection. The operation known as *anterior compartment neck dissection* involves the excision of the level VI lymph nodes. The procedure is indicated for the treatment of the cancers of the thyroid gland, hypopharynx, cervical trachea, cervical esophagus, and the subglottic larynx. The boundaries of the dissection are the hyoid bone superiorly, the suprasternal notch inferiorly, and the carotid sheaths on either side. Hypoparathyroidism may be a disabling complication if care is not taken to identify and preserve the parathyroid glands. It may be necessary to excise and reimplant the glands into the sternomastoid or pectoralis major muscle. Alternatively, the dissection may be limited to one side if the lesion is not close to the midline, particularly if radiation therapy can be given postoperatively.

Posterolateral Neck Dissection. *Posterolateral neck dissection* was initially described by Rochlin in 1962, and later modified and popularized by Diaz et al. [6], for use in patients with cutaneous malignancies of the scalp and the postauricular and suboccipital regions. Unlike all other neck dissections, this operation is performed with the patient in the lateral decubitus position and consists of an en

bloc removal of the lymph nodes in the suboccipital, postauricular, and the upper, middle, and lower jugular nodes along with posterior triangle nodes situated superior to the accessory nerve. Although the original description included sacrifice of the accessory nerve, the internal jugular vein, and a portion of the trapezius muscle, Diaz et al. [6] from the M.D. Anderson Cancer Center showed that preserving these nonlymphatic structures did not increase the failure rate of this operation.

Extended Neck Dissection

In cases of advanced neck disease, certain lymphatic or nonlymphatic structures, not routinely included in the aforementioned neck dissections, may have to be removed. *Extended neck dissection* is the term used to describe these procedures. Retropharyngeal lymph nodes, the hypoglossal nerve, portions of the prevertebral musculature, and the carotid artery are some of the structures that may occasionally have to be excised to obtain negative margins.

Evolution of Surgery for Treatment of Metastatic Neck Disease

Radical neck dissection has been the standard surgical procedure for treatment of metastatic neck cancer since its description by Crile in 1906. Until only a couple of decades ago it has been used widely both as an elective procedure for occult neck disease and a therapeutic one for clinically manifest nodal metastases. In the last two decades, however, it is being increasingly replaced by more conservative operations, particularly in the clinically N0 patients.

Expanding on the idea of preservation of the spinal accessory nerve and internal jugular vein proposed by earlier workers, Bocca et al., in 1967, described his conservation technique of radical neck dissection, in which the spinal accessory nerve, internal jugular vein, and the sternomastoid muscle are preserved [7]. He suggested that this technique could be used even for palpable lymph nodes, as long as these were not fixed, maintaining that his operation was no less radical in extirpating cervical metastases than the conventional "radical" neck dissection, as the lymphatics were well contained within aponeurotic layers that could be peeled away from the important nonlymphatic structures. He questioned the logic in sacrificing these structures, when other structures such as the vagus and hypoglossal nerves, and the carotid artery—equally related anatomically to the lymphatics and lymph nodes—were preserved in the same operation. Preservation of one or more of these three nonlymphatic structures became more common in the 1970s, and such operations came to be known as the *functional* or *modified radical neck dissection*. The initial concerns that such a deviation from the established principle of en bloc resection would compromise the oncologic effectiveness of the operation were mitigated by the findings of studies published as the procedure gained popularity. That the modified procedure is as effective as radical neck dissection for clinically negative necks is more or less accepted, owing largely to studies that have demonstrated no compromise in oncologic safety with this procedure [8–10]. Hence, the use of the radical procedure for elective treatment of the neck is now rare.

In the last decade, focus has shifted instead to the efficacy of SND in this situation (N0 neck). The concept of limiting the number of lymph node groups excised started when supraomohyoid neck dissection was initially explored as a "staging procedure" to be applied to patients with oral cavity and oropharyngeal cancer with

clinically negative necks. The rationale here was that instead of performing an elaborate comprehensive neck dissection including all lymph node levels, a limited dissection to remove the first and second echelon nodes could be performed to identify individuals with occult metastases. This subset of patients could then be considered for a more aggressive treatment, i.e., radical neck dissection or postoperative radiotherapy [11, 12]. Central to this approach was the improvement in the understanding of the drainage patterns of various head and neck cancers. Experimental studies of lymphatic drainage [2] and clinical studies of nodal distribution [3, 13] have enabled reliable prediction of the lymph node groups most likely to be involved with metastatic disease. Importantly, it is also possible to establish which lymph node groups would carry negligible risk of involvement. For example, it is now known that oral cavity cancers most commonly metastasize to levels I, II, and III, and the likelihood of involvement of levels IV and V in these cancers is very small, unless there is advanced disease in the earlier levels. For oropharyngeal, hypopharyngeal, and laryngeal primaries, metastatic deposits tend to be limited to levels II, III, and IV, with level I or V involvement being rare, and when present, usually associated with nodal metastasis at other levels (N2 or greater). The selective procedure SND, therefore, becomes the procedure of choice for staging the neck in patients with oral cavity cancer who are clinically N0, and LND finds a similar application in cancers of the oropharynx, hypopharynx, and larynx. Pitman et al. [14] have compared the recurrence rates in the operated necks between 282 clinically N0 patients undergoing RND with 92 clinically N0 patients undergoing a selective neck dissection—"anterolateral" or SND (levels I-IV or I-III)—for oral cavity cancers and lateral (levels II-IV) for oropharyngeal, hypopharyngeal, or laryngeal cancers. There was no statistically significant difference in recurrence between the two groups (5.8% versus 3.5%), indicating that the effectiveness of the two procedures in controlling occult neck disease is comparable.

Further refinements in the theme of conservation need to be evaluated so as to minimize morbidity and optimize oncologic safety. Talmi et al. [15], subdividing level II into IIA and IIB, found that, of 71 patients who underwent neck dissection only 4 had involvement of level IIB; all of these patients had been staged N2 or greater preoperatively. If this finding is confirmed with larger numbers of patients, routine removal of level IIB in elective SND may be considered unnecessary. In contrast, Byers et al. [16], in a review of 277 previously untreated cases of oral tongue cancer, found that 15.8% of their cases either had level IV metastasis as the only manifestation of disease in the neck or the level III node was the only node present without disease in level I-II. Based on these findings, they suggested that elective neck dissection for oral tongue cancers should routinely include levels I through IV. Clearly, an ideal neck dissection is one that is tailored to conform to the metastatic patterns of the primary tumor. It may thus be argued that neck dissection must include the retropharyngeal nodes for all oropharyngeal, hypopharyngeal, and laryngeal cancers, and the central compartment (level VI) nodes for all glottic and subglottic cancers. In that regard, the current classification of neck dissections cannot adequately describe all possible modifications of this operation. This underscores the importance of a multidisciplinary team approach in the treatment of head and neck tumors, where the knowledge and experience of physicians and surgeons specializing in head and neck oncology can be pooled to address appropriately the challenge posed by each individual patient.

Scope of Selective Neck Dissection

In the preceding section, we discussed the increasing role of more conservative neck dissection operations in patients with clinically N0 disease for prophylactic treatment of occult metastases. We now will examine the application of selective operations for clinically palpable metastatic neck disease.

There is a growing body of opinion that the role of SND may be enlarged, so that it may be viewed as a therapeutic—rather than only a diagnostic or staging—procedure for the treatment of early (occult or palpable) metastatic neck disease. Reporting their results in 234 patients who were treated with SND, with or without adjuvant radiotherapy, for N0 or N+ upper aerodigestive tract cancers, Medina and Byers [17] found a recurrence rate in the neck of 5% when lymph nodes removed were histologically negative, 10% when a single nodal metastasis without extracapsular invasion was found, and 24% when multiple positive nodes or extracapsular invasion was found. They compared these results to those obtained with radical neck dissection, as reported by Strong [18], who found recurrence in 6.7% cases when nodes were histologically negative, 36.5% when positive nodes were found at one level, and 71.3% when nodes were positive at multiple levels. Medina and Byers concluded that SND has a therapeutic value that compares favorably with the classic RND in clinically N0 and early N+ disease. Along similar lines, Spiro et al. [11] reported their results in 248 elective SND and 48 therapeutic SND for limited N+ disease performed in patients with oral or oropharyngeal cancer. Cervical recurrence rates among 205 patients with histologically negative necks, 60 patients with clinically negative but histologically positive necks, and 31 patients with clinically and histologically positive necks were 5%, 7%, and 6%, respectively. These figures indicate that presence of early metastatic disease does not diminish the effectiveness of SND in achieving control in the neck. On the strength of such evidence, the use of SND has slowly but surely crept into the management of N0pN+ and N1 disease. Selective neck dissection is being increasingly viewed, and used, as the definitive therapeutic surgical procedure for occult as well as early palpable neck disease. More recently, however, Byers et al. [19] have presented retrospective evidence from 517 suprahyoid, supraomohyoid, and lateral selective neck dissections that suggests that recurrence rates are higher if postoperative radiation is not used in cases with one or more pathologically positive lymph nodes (recurrence of 35.7% versus 5.6% for N1 and 14% versus 8.3% for N2B). Hence, whether a selective neck dissection is adequate treatment for early metastatic disease on its own or it needs to be supplemented with postoperative radiation is still a matter of debate. Certainly, SND is the procedure of choice for treatment of early neck disease when it is known that radiation therapy will be used postoperatively.

The application of SND in cases with more advanced nodal involvement remains controversial. If SND is equal to the task of combating small metastatic lymph nodes, could it be safe to extend the logic to larger lymph nodes, as long as there has been no gross invasion of the soft tissues? In a retrospective study of 46 SND and 48 LND performed over a 5-year period at the University of California, San Diego Medical Center for pN0-N3 necks, Pellitteri et al. [20] found that the recurrence rate, at a minimum of 2 years, in a subgroup of patients with N2/N3 disease was not appreciably different from that of the entire study population. In another study, Traynor et al. [21], from The Oregon Health Sciences University, reported their series of 29 cases, all with N1-N2C disease, in whom

36 SND (SOND or LND) were carried out. At a minimum follow-up of 2 years, only one patient failed in the treated neck. Although both these reports point to the possibility that SND may become acceptable for patients with moderately advanced neck disease, it is useful to remember that evidence presented in both these studies is retrospective and does not carry the weight of adequate numbers. In fact, any steps in this direction must be tempered by the pragmatism of not trading oncologic safety for unidentifiable gains. Advanced metastatic disease in the neck usually represents a more aggressive neoplastic process, with a higher likelihood of extracapsular spread, and better judgment may lie in dignifying it with a more radical operation.

At present a comprehensive neck dissection—radical or modified—remains the procedure of choice for treating moderately advanced nodal disease. In the absence of gross invasion, preservation of the accessory nerve, sternomastoid muscle, or the internal jugular vein will not necessarily diminish oncologic efficacy, although the jugular vein is the structure most likely to be sacrificed with more advanced disease. Anderson et al. [22] compared 5-year survival and failure rates in a group of 234 patients who had undergone a radical neck dissection with another group of 132 patients treated with a nerve-sparing procedure (MRND I). With the analysis controlled for N stage, presence of extracapsular spread, and presence of nodes along the spinal accessory nerve, no significant difference could be found between the two groups (63% survival and 12% failure rates for RND versus 71% survival and 8% failure for MRND I). Similar retrospective comparisons by Bocca et al. [9] and Jesse et al. [10] have established the safety profile of nerve-sparing comprehensive neck dissection for advanced (as well as early) neck disease.

Shoulder Disability in Neck Dissection

The idea behind the evolution of neck dissection toward more conservative operations is that of limiting the amount of postoperative morbidity. The shoulder syndrome, originally described by Nahum in 1961, is a painful condition of the shoulder with limitation of movement about this joint that contributes significantly to the long-term morbidity associated with this operation [23]. Clinical studies on shoulder-related symptoms have shown that the incidence and severity of disability are highest when the spinal accessory nerve is sacrificed [24, 25]. Moreover, when various types of nerve-sparing operations are compared, those operations involving extensive dissection around the nerve in levels II and V are more likely to result in shoulder symptoms than those where there has been limited dissection in level II alone [26]. Although preservation of the accessory nerve significantly reduces the occurrence of shoulder syndrome, it does not guarantee that the patient will escape it. Weakness of the trapezius muscle leading to shoulder dysfunction and pain occurs in a significant proportion of the patients undergoing the nerve-sparing operations, particularly in the first few months after surgery [27]. Fortunately, this dysfunction is temporary in most patients, with symptoms resolving in the ensuing months. This underscores the importance of routinely advising physical therapy exercises of the shoulder joint, even in patients undergoing nerve-sparing operations. Permanent shoulder disability can develop in these patients, although this is more likely to be due to inadvertent damage to the nerve during the operation. This can happen if unduly strong traction is applied to the sternomastoid muscle in the region where the nerve enters this muscle. Also, trac-

tion of the sternomastoid muscle may cause the part of the nerve distal to the muscle to take the form of a cervical nerve root, and therefore to be transected if the surgeon is inexperienced.

If the upper portion of the nerve is involved with cancer and has to be excised, it may be possible to perform a cable nerve graft to restore continuity. Although not a common practice, this procedure has been reported to yield an outcome that is intermediate between nerve transection and nerve preservation with respect to shoulder function in the long term [28]. Preserving the lower half of the accessory nerve along with its cervical contributions may also result in improved function, at least in some cases, as motor contributions from these nerves may be present more often than previously recognized [29, 30].

In summary, principles of conservation surgery, as discussed in this article, should be applied rigorously to minimize the morbidity associated with neck dissection. Rational use of the various types of neck dissection will result in an improved cosmetic and functional outcome for patients undergoing surgery for treatment of head and neck cancer.

Résumé. L'adénoyphadéctomie cervicale joue un rôle crucial dans la prise en charge des métastases cervicales. Jusqu'à présent, l'adénoyphadéctomie cervicale radicale a été le traitement de choix pour les adénopathies malignes quel qu'en soit le stade. Cependant, ces dernières années, on a vu se dessiner une tendance vers des interventions plus conservatrices, dans les quelles certaines structures lymphatiques et certains groupes ganglionnaires peuvent être conservés de façon sélective. L'adénoyphadéctomie cervicale radicale reste toujours le standard chirurgical contre lequel toutes les modifications thérapeutiques doivent être comparées. Le souhait de réaliser une chirurgie conservatrice vient de la constatation que la chirurgie radicale est associée à une morbidité postopératoire notable et que certaines structures enlevées au cours de cette opération peuvent en fait être conservées sans pour autant compromettre le résultat oncologique. Le but de cet article a été de discuter de l'évolution de la chirurgie conservatrice dans la prise en charge de la maladie métastatique du cou, et de définir les applications cliniques et d'évaluer les conséquences de ces approches conservatrices du point de vue fonctionnel.

Resumen. La disección radical del cuello juega un papel crucial en el manejo de las metástasis cervicales. Hasta hace poco, la disección radical fue el tratamiento estándar de la adenopatía neoplásica maligna en todo tipo de estadificación ganglionar. Sin embargo, en los últimos años se registra una tendencia hacia el desarrollo de operaciones más conservadoras, con las cuales se pueden preservar selectivamente determinadas estructuras no linfáticas y grupos ganglionares, aunque la disección radical del cuello sigue siendo el estándar quirúrgico que sirve como base de comparación. La necesidad de realizar cirugía más conservadora proviene del reconocimiento de que la operación radical se acompaña de significativa morbilidad postoperatoria y de que algunas de las estructuras que son resecadas en el curso de esta operación pueden realmente ser preservadas sin comprometer la efectividad oncológica. El propósito de este artículo es discutir la evolución de la cirugía conservadora en el manejo de la enfermedad metastásica cervical, definir las aplicaciones de los diversos tipos de disección cervical y evaluar las implicaciones de estos abordajes conservadores en cuanto a la preservación funcional.

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