

Laser in head and neck surgery

Billie L. Aronoff, M.D.

(Director of Surgical Oncology, Sammons Cancer Center, Clinical Professor of
Surgery, Southwestern Medical School)
Dallas, TX 75246, Tel: (214) 821-2317

The CO₂ laser has been used in large tumors about the entire body, but, primarily, our experience has been with tumors of the head and neck. We find that in cutting flaps, either from the chest, neck or from the forehead, the laser works excellently. It is particularly helpful when patients have any sort of blood dyscrasia in which the platelets are lowered. Its use in the face of infection is excellent and tends to sterilize the base as one excises the lesion. We have used it for many different purposes—excision of tumors of the face with either primary closure or skin graft and tumors of the scalp with much the same sort of treatment.

In the oral cavity, one can certainly vaporize large areas and, by biopsy, or by clinical impression, be sure they have removed the tumor. They can then observe a relatively painless lesion heal without grafting or deformity.

In larger tumors, such as Marjolin's ulcers of the head and neck, where bleeding could be a problem, the laser tends to seal the smaller vessels. Its use in neck dissections will be discussed.

In the oral cavity, in cutting through the tongue and pharynx or buccal mucosa, the laser certainly makes it easier and practically bloodless, although larger vessels will always have to be secured and ligated.

The advantages and disadvantages of the CO₂ laser will be presented and well illustrated by slides. A movie will be used to demonstrate the use both in sealing lymphangiomas and excision tumors. A limited experience with the argon laser in portwine stains will also be demonstrated.

激光用于头、颈部外科手术

Billie L. Aronoff, M. D.

(西南医学院外科临床教授, Sammons 癌中心肿瘤外科主任)

CO₂ 激光器已用于全身的大肿瘤手术, 但我们的经验主要是头、颈部肿瘤手术。我们发现用激光切取胸部、颈部、额部皮瓣都有极好的效果。对那些具有血小板降低的任何一种血液恶病质的病人尤有帮助。用激光治疗面部感染时, 切除病灶可使基部无菌, 疗效卓著。我们曾将 CO₂ 激光用于不同目的——用一次闭合或植皮的方法切除面部和头皮肿瘤。

在口腔里, 当然可以气化较大的区域, 并可通过活检和临床印象确定肿瘤已被切除。手术痛苦较少, 病灶愈合不需移植, 也不会有畸变。

较大的肿瘤, 如头和颈部的 Marjolin 氏溃疡, 在这些部位出血可能会成为一个问题, 激光却可以封住较小的血管。将讨论激光在颈解剖上的应用。

在口腔里, CO₂ 激光能切开舌、咽、颊部粘膜。激光肯定可使手术简便, 而且实际上是无血的。但是大血管还是需要处理和结扎的。

将介绍 CO₂ 激光的优点和缺点并用幻灯详细说明。有一部影片将展示激光在封闭淋巴管和切除肿瘤中的应用, 同时将说明用氩激光治疗葡萄酒样色斑的少量经验。