

Spaces of the head and neck

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Dr. Julia Frühwald-Pallamar

Dr. Frühwald-Pallamar was born in Vienna, where she has studied and completed her residency at the Medical University of Vienna. Since 2011 she is attending the department of radiology division neuroradiology and musculoskeletal radiology at Medical University of Vienna and since 2016, she is a medical director of a private CT and MR institution in St. Pölten, Austria.

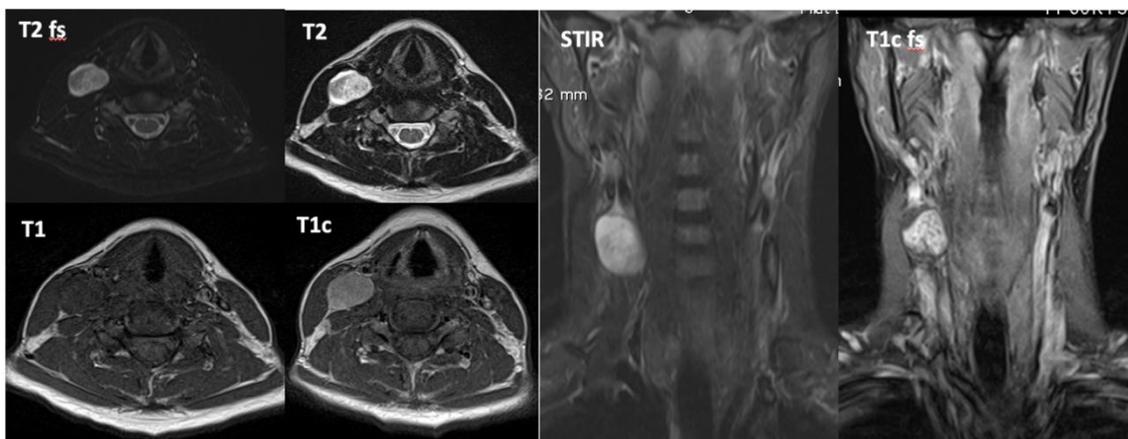
Furthermore, Dr. Frühwald-Pallamar is the vice-head of the head and neck division of the Austrian Radiology Society and a member of the ESR e-Learning Head and Neck Subcommittee.



Learning Objectives

1. To become familiar with the concept of the superficial and deep cervical fascia as well as the different layers of the deep cervical fascia
2. To describe the anatomical delineation of the masticator space, parotid space, submandibular space, parapharyngeal space and visceral space.
3. To become familiar with the content of the different neck spaces
4. To learn about typical lesions of the masticator, parotid and parapharyngeal space

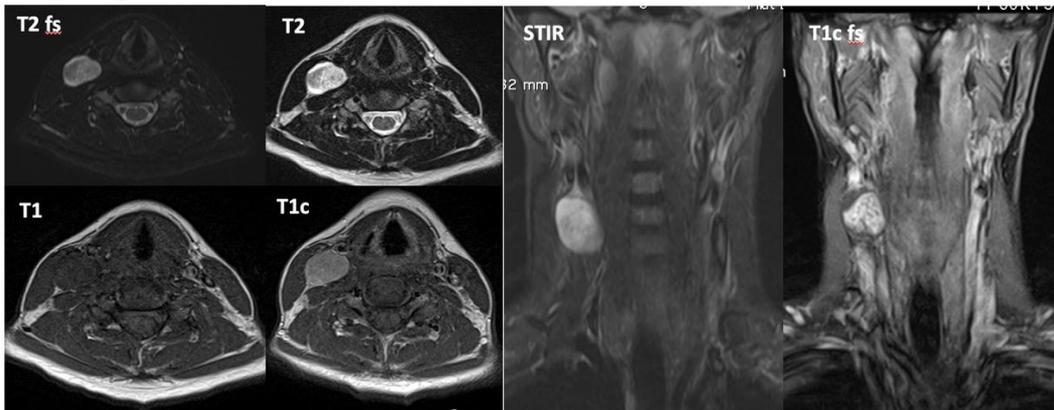
Teaser Case



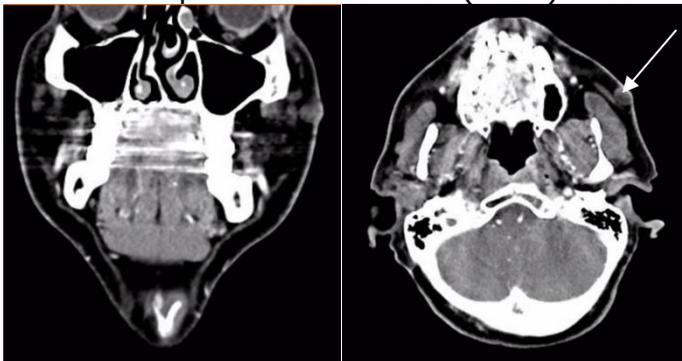
33 years old female patient with growing lump on her right neck. What is the most likely diagnosis? Can you name the space the lesion is located?

Test Your Knowledge

- The mylohyoid muscle runs through which space?
 - Masticator space
 - Parapharyngeal space
 - Submandibular space – correct
 - Retropharyngeal space
 - Parotid space
- Glomus tumors are often found in which space?
 - Parotid space
 - Masticator space
 - Carotid space – correct
 - Prevertebral space
 - Retropharyngeal space
- 33 years old female patient with growing lump on her right neck. What is the most likely diagnosis and space?
 - Pleomorphic adenoma in submandibular space
 - Pleomorphic adenoma in parotid space
 - Glomus tumor in carotid space
 - Schwannoma in carotid space - correct
 - Abscess in retropharyngeal space

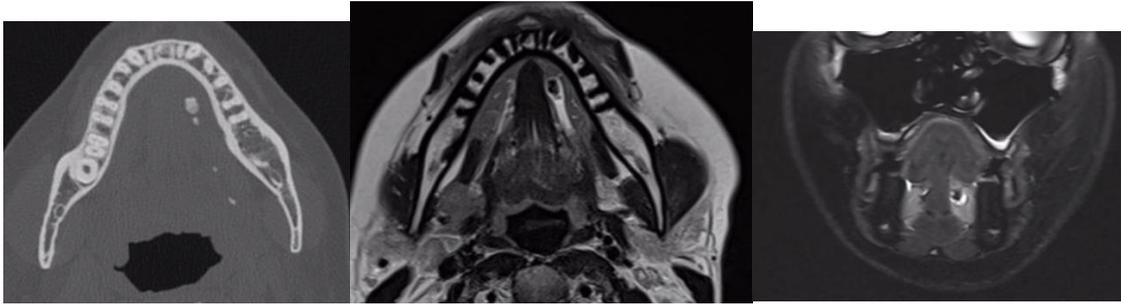


- Pleomorphic adenoma in submandibular space
 - Pleomorphic adenoma in parotid space
 - Glomus tumor in carotid space
 - Schwannoma in carotid space - correct
 - Abscess in retropharyngeal space
- In which compartment is the lesion (arrow) located?
 - Parotid space
 - Carotid space
 - Masticator space
 - Space of superficial cervical fascia - correct
 - Submandibular space



- Parotid space
- Carotid space
- Masticator space
- Space of superficial cervical fascia - correct
- Submandibular space

5. Where are the calcifications located?



- a. Submandibular space – correct
- b. Carotid space
- c. Masticator space
- d. Mucosa space
- e. Parotid space