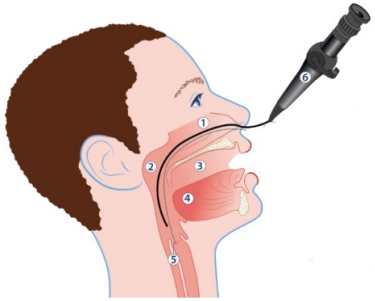
UMC Utrecht

work-up: wat kan ik verwachten?

Patiëntendag Subglottische Stenose
Emke van den Broek, KNO UMC Utrecht
23-06-2024

Anamnese en lichamelijk onderzoek

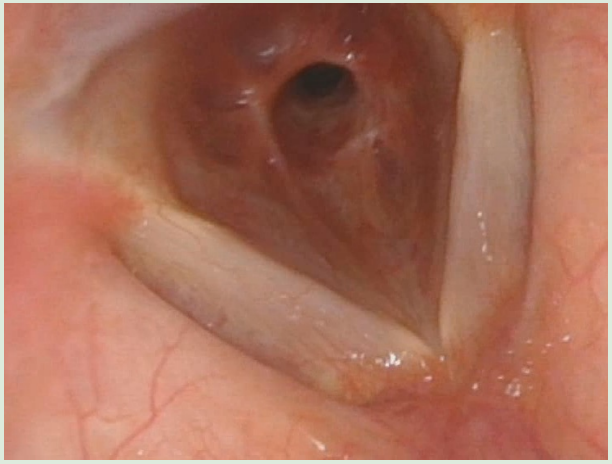


Luchtweg klachten
- benauwd/benauwd bij inspanning
- hoesten
- stem

……..
Impact op leven

…….
Trauma/intubatie/auto-immuun/allergie/gewicht

KNO-onderzoek: videolaryngo(tracheo)scopie



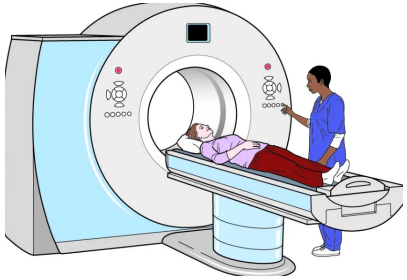
Aanvullend onderzoek

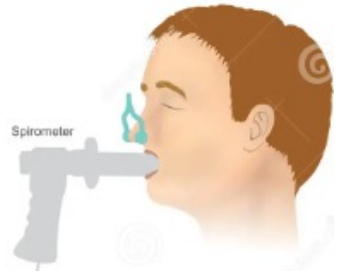
Bloedonderzoek

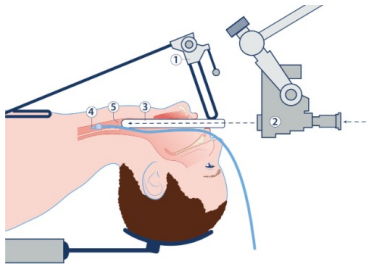
Beeldvorming

Longfunctie

Pathologie (weefsel onderzoek)







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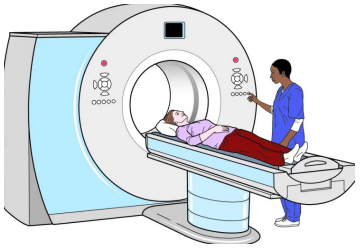
Bloed onderzoek

Ontsteking algemeen
bloedbeeld, CRP, BSE

Ontsteking auto-immuun
ANA, ANCA

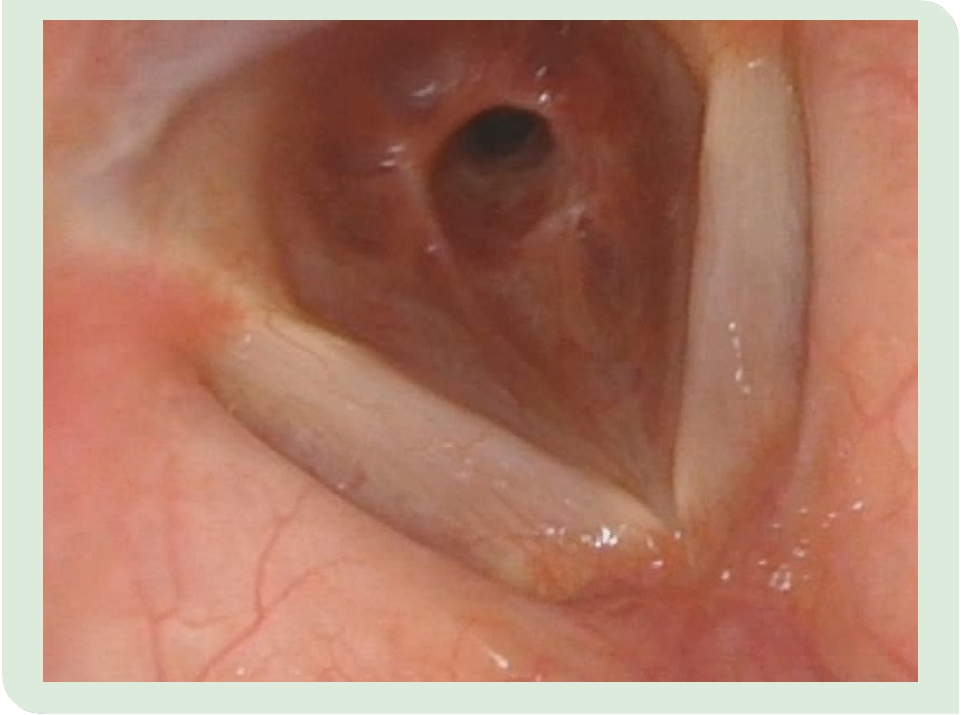
Aanvullingen mogelijk, zn iom reumatoloog
(bv nierfunctie, ACE, IgG4, complementfactoren)

Beeldvorming

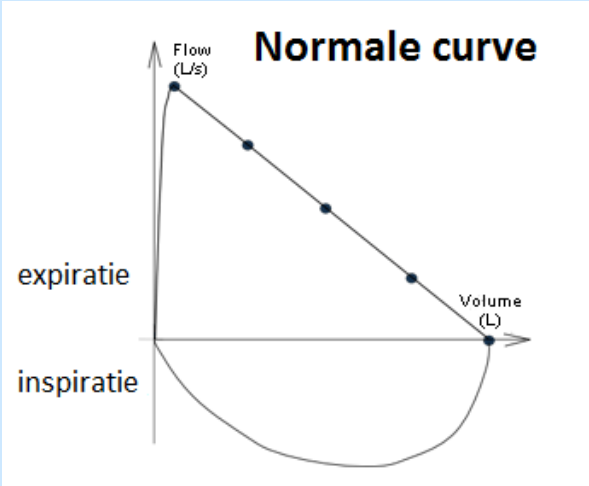


Beeldvorming

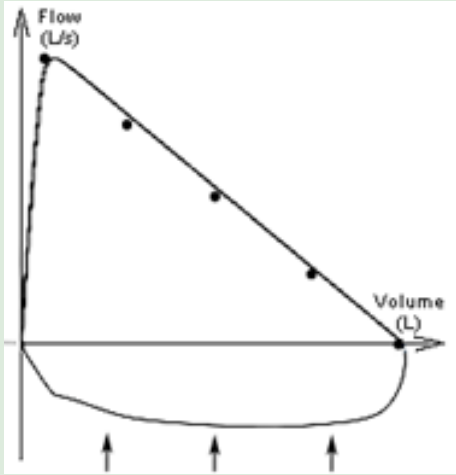
Laryngotracheoscopie

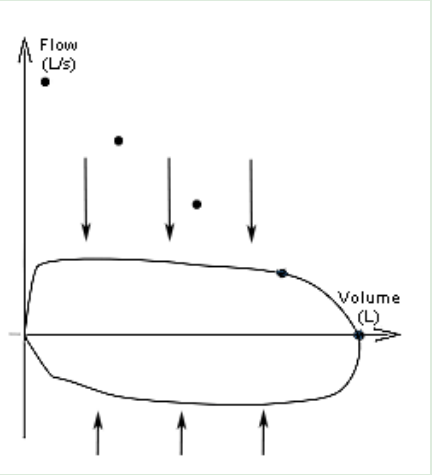


Longfunctie

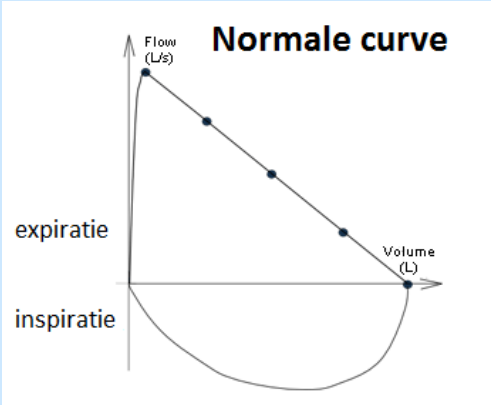


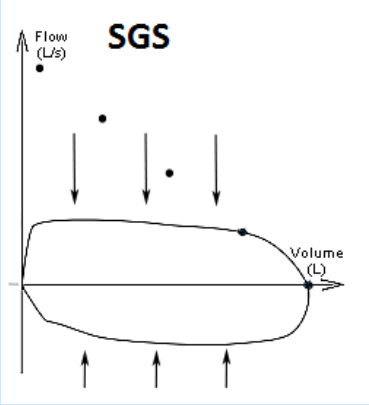
SGS

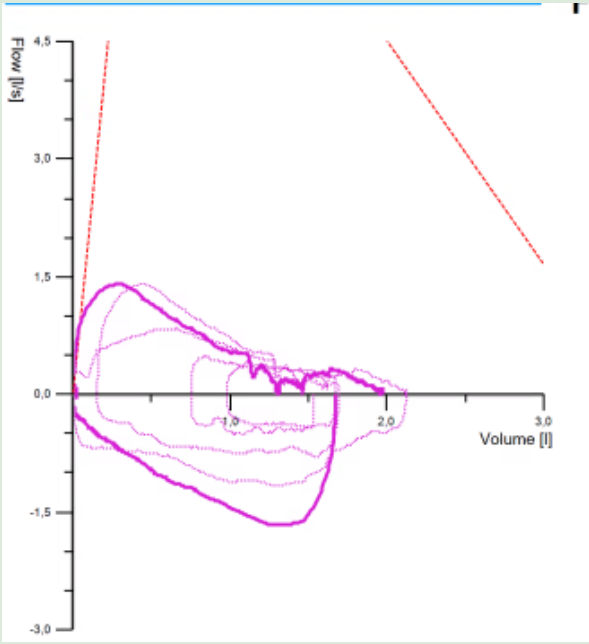




Longfunctie







Longfunctie

Welk waarde?

- Flowloop

- FIV_1

- EDI
(Expiratory disproportion index
FEV_1/PEF)

- PIF
- PEF (te gebruiken als thuismeting)

"Belangrijker nog dan je er *waar* je naar kijkt, is *dat* je er naar kijkt"

Longfunctie

Welk waarde?

- Flowloop

- FIV_1

- EDI
(Expiratory disproportion index FEV_1/PEF)

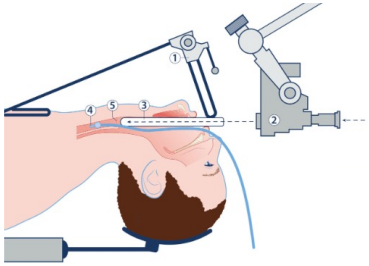
- PIF
- PEF (te gebruiken als thuismeting)

- **Rol in *vroege* diagnostiek**

- **Kennisagenda KNO**

“Wat is de diagnostische accuratesse en klinische toepasbaarheid van de, uit spirometrie afgeleide screeningsparameter, 'Expiratory Disproportion Index' voor het detecteren van een benigne laryngotracheale stenose in de long- en huisartsenpraktijk?”

Weefsel onderzoek



Ontstekingskenmerken algemeen

Ontstekingskenmerken specifieke ziektes
(oa vaatontsteking, granulomen, IgG4-positieve plasma cellen, etc)

Vragen?
Aanvullingen?

Dank!

Refenties

Schuering JHC, Halperin IJY, Ninaber MK, Willems LNA, van Benthem PPG, Sjögren EV, Langeveld APM. The diagnostic accuracy of spirometry as screening tool for adult patients with a benign subglottic stenosis. BMC Pulm Med. 2023 Aug 28;23(1):314. doi: 10.1186/s12890-023-02592-4. PMID: 37641058; PMCID: PMC10464043.

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Alshareef W, Almutairi N, Sindi A, Almakoshi L, Zakzouk A, Aljasser A, Alammar A. Spirometry in laryngotracheal stenosis: a systematic review and meta-analysis. Eur Arch Otorhinolaryngol. 2023 Nov;280(11):4783-4792. doi: 10.1007/s00405-023-08159-7. Epub 2023 Jul 31. PMID: 37522909.

European Archives of Oto-Rhino-Laryngology (2023) 280:4783–4792
https://doi.org/10.1007/s00405-023-08159-7

REVIEW ARTICLE

Spirometry in laryngotracheal stenosis: a systematic review and meta-analysis

Waleed Alshareef[1,2] · Nasser Almutairi[1,3] · Abdullah Sindi[1] · Latifah Almakoshi[1] · Abdulmajeed Zakzouk[1] · Abdullah Aljasser[1] · Ahmed Alammar[1]

Conclusion Spirometry is a valuable tool for assessing patients with LTS. PEF, EDI, and PIF were the most commonly reported spirometry parameters that significantly improved after airway stenosis was relieved.

Revisiting the role of Spirometry in the diagnosis of upper airway obstruction

Deepthi Laldayal
European Respiratory Journal 2017 50: PA1098; **DOI:** 10.1183/1393003.congress-2017.PA1098

Methods: In a two years study period, the demographic data, diagnosis, relevant imaging and bronchoscopic reports of patients were noted. All spirometries were reviewed for three quantitative and three qualitative indices. These comprised of Empey's Index, ratio of the flow at the mid-point of the forced expiratory manoeuvre to the flow at the mid-point of the forced inspiratory manoeuvre (FEF50/FIF50) < 0.3 or < 1, FIF50< 100 L/min and qualitative features like flattening of inspiratory or expiratory loops, box shaped loop and oscillations on the loop.

Results: 770 spirometries were analyzed, with a mean age of population of 43 years. 24 patients of UAO resulting in a proportion of 3.1%. Flow volume loop changes were able to differentiate extra and intrathoracic location in all cases. FEF50/ FIF50 value could accurately differentiate extrathoracic versus intrathoracic obstruction in 83.3%.

UAO INDEX	SENSIVITY	SPECIFICITY	PPV	NPV
EMPEY'S INDEX	62.5%	89.4%	15.7%	98.6%
FLOW VOLUME LOOP	95.6%	99.7%	91.6%	99.8%
FIF50<100L/MIN	79.1%	80.4%	11.5%	99.1%