



When is Speech Therapy Needed? The Speech Therapist's Point of View



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When is Speech Therapy needed?
The Speech Review

OR NOT

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First: the team



I

N



A



M



I

First: the team



Prerequisites

The professional relations (PR) are made primarily of interest.



Prerequisites

- PR based :
 - on respect for the skills of each other
 - on listening
 - on the ability of self evaluation





**Properly
treat and
cure**

**Be
comfortable
with his
voice**



**To help
quickly
and
efficiently**



**Participate
and guide
the student
to develop
his voice**





Belgium Regulation

- For a pathological diagnosis
 - Dysfunctional dysphonia with professional voice handicap
 - Organic dysphonia
- 1 vocal profile/year, 1 extension
- Reimbursement of the vocal profile **IF** followed by sessions of rehabilitation
- 144 sessions/year
- 2 consecutive years.

Consequences

For the speech therapist

- « Fidelity »
 - Consumption of the number of sessions given by the agreement without real necessity.
- Respect of the initial prescription
- Fear of not reaching the final goal

For the patient

- With the agreement, the financial contribution of the patient is reduced.
- Impression of saving a lot of time.
- Full compliance with the treatment.
- With the agreement: no self evaluation.



- Dragging patients along two years in rehabilitation and lose all possibility of future insurance reimbursement in case of reentrance...



- Rehabilitation can imply other needs: psychotherapy for example, ...





CASE 1: Oedema

Anamnesis:

Classical singer for 10 years

Family trauma

At each emotional moment, the voice is fading

Psychotherapy:
E.M.D.R.
(Eye Movement
Desensitization
and Reprocessing)

| Vocal profile | 20/07/10 | 20/09/10 |
|--------------------|-------------------|---------------------------|
| FO (Hz) | 196,757 | 285,501* |
| TMP (sec) | 15,6 | 11,44 |
| MFR | 0,348 | 0,488 |
| F Range (Hz) | 130,81 – 830,61 | 123,47 – 622,25 |
| I Range (dB) | 75 - 120 | 61 - 107 |
| DSI | -1,141 | 1,025* |
| PSGE (cmH20) C-L-S | 5,29; 3,95; 9,98 | 5,36; 3,92; 13,65 |
| VHI Singer | G:46 – 13, 20, 13 | G: 33 – 12, 13, 8* |

* Improved

CASE 2: Polype LVF

- Anamnesis: Housemaid, 28 Y, Loud intensity
- Surgery: Pr. C. Finck.

S_N(11-07-11).avi

| Vocal profile | 5/09/11 |
|---------------------------|------------------------|
| F0 (Hz) | 228,16 |
| SD F | 4,154 |
| TMP (sec) | 9,216 |
| MFR | 1,28 |
| F Range (Hz) | 174,61 – 349,23 |
| I Range (dB) | 77 - 102 |
| DSI | -6,279 |
| PSGE (cmH20) conversation | 18,4 à 90,8 |
| VHI | 32 – 5, 9, 18 |

CASE 2: Polype LVF

- Sound pressure level controlled

S N(24-10-11).avi

| Vocal profile | 5/09/11 | 26/10/11 |
|---------------------------|-----------------|-------------------------|
| F0 (Hz) | 228,16 | 217,15* |
| SD F | 4,154 | 2,565 * |
| TMP (sec) | 9,216 | 11,264 * |
| MFR | 1,28 | 0,776 * |
| F Range (Hz) | 174,61 – 349,23 | 174,61 – 523,25* |
| I Range (dB) | 77 - 102 | 66* – 95 |
| DSI | -6,279 | -1,256 * |
| PSGE (cmH20) conversation | 18,4 à 90,8 | 11,2* à 83,4 |
| VHI | 32 – 5, 9, 18 | 0 for all* |

* improved

- Rehabilitate a patient with a "wrong" diagnosis can lead to discouragement and abandon.



CASE 3: Nodules – Cysts

- Anamnesis: Young wife (25 Y) waitress.
1 year of Voice therapy: no effect.
- Surgery for bilateral cysts in october

| Vocal profile | April 2010 | April 2011 | Nov. 2011 post op |
|-------------------|------------|------------|-------------------|
| FO (Hz) | 208Hz 75dB | 173Hz --dB | 279Hz 82dB |
| TMP (sec) | | | |
| MFR | | | |
| F Range (Hz) | | | |
| I Range (dB) | | | |
| DSI | | | |
| PSGE (conv) cmH20 | | | |
| VHI | | | |

Consultation of Prof. C. Finck

CASE 3: Nodules – Cysts

- Anamnesis: Young wife (25 Y) waitress.
1 year of Voice therapy: no effect.
- Surgery for bilateral cysts in october

| Vocal profile | May 2010 | April 2011 | Nov. 2011 post op |
|-------------------|-----------------|-----------------|-------------------|
| FO (Hz) | 258 | 245 | 262 |
| TMP (sec) | 13 | 9 | 11 |
| MFR | 0,344 | 1,232 | 0,552 |
| F Range (Hz) | 165 - 659 | 196 - 440 | 185 - 466 |
| I Range (dB) | 78 - 102 | 83 - 99 | 78 - 99 |
| DSI | -4,474 | -9,3 | -7,4 |
| PSGE (conv) cmH2O | 7 à 77 dB | 13,55 à 86 | 10,59 à 83 |
| VHI | 50 – 10, 19, 21 | 71 – 17, 25, 29 | 60 – 9, 25, 26 |

American Regulation

Many thanks to
Edie Hapner.



In average, the number
of sessions with a
reimbursement varies
between **6 to 8.**

| ROY&al 1997 | BASSIOUNY 1998 | CARDING&al 1999 | McCRORY 2001 | ROY&al 2001 | SPEYER&al 2002 |
|--|--|--|--|---|--|
| Shrt & Lg Term eff. Manual Circum. Th. | Accent Method Efficacy | Effect. Voice Th. | Evaluate Direct and Ind. Th | Effect of 2 treatmnt Approaches | Effect of Voice Th. |
| N: 25 | N: 42 2 Grpes: - Hygiene Th - Accent Method | N: 45 3 Grpes: - Direct TH - Indirect TH - Without Treat. | N: 26 1992 - 1998 | N: 58 3 Grpes: 1. Hygiene 2. Fonct. V. 3. Without Treat. | N: 40 |
| Non organic Dysphonia. | Variety of path. | Non organic Dysphonia | Nodules | Nodules | Chronic Dysphonia |
| 2X/day 6 weeks | 2X/week (20') 20 sessions | 1X/week 8 weeks | 1X/week 45 à 60' | 2/days 6 weeks | 2X/weeks 3 mois |
| Perceptive, Acoustic | VLS, Perceptive, Acoustic, Aerodynam. | VLS, Perceptive, Acoustique, Aerodynam. | VLS, Perceptive, Acoustique, Aérodynam. | Pre et post VHI 6 months | VLS, Perceptive, Acoust |
| useful and effective short-term | significant improvement for G2 | G3 (93% improve) >G2 (46% improve) > G1 (86% no improvement.) | 70% improve Nodules disapear, 90% 2-12 sessions effective. | significant improvement for G2 | 📉 50% lesion size Glottal closure improvement |

About the timing

- Studies which focused on short-term efficiency demonstrate greater effectiveness than those which studied the long-term effects.
- The longer the treatment is, the higher the vocal handicap*

*Morsomme D & al. (2010). Subjective evaluation of the long term efficiency of speech therapy on dysfunctional dysphonia. *J.Voice*, 24(2), 178-182.

About the therapy

MISUSE

- Vocal misuse is using the voice in a way* that causes it to be injured.
- These behaviors can lead to vocal fold lesions, and in some cases can cause permanent damage to the voice.

*Yelling, screaming, loud talking, throat clearing, coughing,

OVERUSE

- Vocal overuse is using the voice too much, so that it gets overly tired. This can lead to an increased risk of vocal fold injury.

Other alternatives

- Not sufficiently exploited:
 - Headset to reduce the intensity
 - Behavioral therapies
- Promising tools:
 - Vox log
 - APM
 - Prototype (Labo Traitement des Signaux, J Schoentgen)





What do we expect?

- A new regulation based on a number of sessions specified but not defined in time.
- Refund any vocal profiles
 - participates fully in the decision of the treatment plan.
- Think short term efficiency
- Other alternatives to treat the voice



THANK YOU FOR YOUR ATTENTION.