# Olfactory obsessions – individual cases or one of the symptoms of obsessive-compulsive disorder? An analysis of 2 clinical cases.

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#### Summary

Aim. The aim of this work is to demonstrate that symptoms of obsessive-compulsive disorder are not limited to disorders in the content of thoughts but are also related to the sphere of senses.
Material and method. The paper presents 2 cases of OCD patients who experience olfactory obsessions. An introductory clinical analysis of this phenomenon was made and a diagnostic procedure was suggested.
Discussion. Olfactory (sensory) obsessions can occur in the course of obsessive-compulsive disorder; so far this phenomenon has not been described in generally acknowledged OCD definitions that the author is familiar with.

OCD / olfactory obsessions / diagnostic procedures / Olfactory Obsessions Questionnaire

# INTRODUCTION

According to all acknowledged medical definitions, the leading symptoms of obsessive-compulsive disorder are obsessions. Obviously, the disease can affect both the sphere of thoughts and that of physical movements; more precisely, then, the term "obsessions" refers to the thoughts, while with reference to the movements the term "compulsions" is used. Although obsessions and compulsions can form specific rituals, often very complex and mixed, i.e. obsessive-compulsive, even if the system of obsessions defined in that way is very complicated, the difference is only that of quantity and not of quality. Definitions of obsessive-compulsive disorder which the author is familiar with, mention also other pathological symptoms. They usually include: obsessive impulses/images, obsessive doubts, anxiety. Obsessive impulses or images,

as well as obsessive doubts, result from disorders in the content of thoughts; anxiety, on the other hand, they are symptoms related to disorders in the emotional sphere [1, 2, 3, 4].

None of the classifications or clinical descriptions available to the author suggests that OCD can be related also to disorders in the sphere of senses. The aim of this work is to show that obsessions can refer to this sphere of psychopathology as well.

## MATERIAL

#### **Description of 2 clinical cases**

#### Case 1

Ksawery, aged 29, has been suffering from fullsymptom OCD since the age of 15, and has been receiving relevant treatment since the age of 25. The clinical picture was dominated by: contrasting obsessions referring to the religious sphere; obsessions of purity or cleanness; uncertainty as

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for the patient's own sexuality; compulsions related to the avoidance of any possibilities of getting dirty (physically or mentally), the aim of which was at the same time to remove the anxiety about becoming infected; the patient would try to accomplish this aim by performing specific rituals, which he would weave into the rhythm of everyday activities.

Among various obsessions, the patient described also his anxiety over having his shoes dirtied by dogs' excrements. When asked why - among other symptoms, which were related to more metaphysical matters - he so often mentioned precisely this very mundane issue, Ksawery replied that he did so because he was anxious about extremely tiring rituals he would have to face in case he – as he put it – "stepped in". In this particular case, the patient was not anxious about contracting a sexually transmitted disease, an unknown neuroinfection or about becoming spiritually disgraced. On the contrary, his explanations were very simple: namely, whenever his shoes happened to become dirtied by dogs' excrements, Ksawery experienced a particularly intense discomfort, resulting from the fact that the shoes could not be thoroughly cleaned, and, therefore, this "hideous smell" was impossible to remove. The patient admitted that although in such situations he would clean his shoes for an unusually long time (he even sometimes used a washing machine) the smell of dogs' excrement returned to him persistently for the period of 7-14 days. What was worse, the smell was also present in other places: the inside of the car, other shoes which Ksawery used, his flat or even the pavement or stairs which he passed on his way to work - all these seemed to indirectly become dirty as well. Moreover, the unwanted smell plagued Ksawery in situations which he considered important, such as during business meetings that he participated in, at meals which he ate in public places, in a cinema or on a walk. It was precisely these sensations which made the patient the most anxious: although Ksawery was convinced that they were absurd he had to check whether indeed his shoes still emitted the unpleasant smell. Trying to hide himself or pretending that he was searching for something, Ksawery would bend down and smell his shoes until he reassured himself that the past unpleasant smell could not in fact

be justified by any real reason. In spite of checking, however, the patient could again smell dogs' excrements some minutes later. These symptoms were gradually reduced and usually disappeared one week after the "stepping in", up to the next unfortunate event of this kind. The EEG results were normal, which is important in differential diagnosis.

#### Analysis of case 1

While analysing Ksawery's case, it has to be admitted that olfactory obsessions which he describes are yet another manifestation of the obsessive-compulsive disorder. In his experience of the unwanted smell of the shoes, Ksawery manifested features typical for the obsession, which is intrusive, unwanted, recurrent and persuasive, forcing the patient to perform compulsive, i.e. checking, actions, although he/she finds them irrational and embarrassing. At the same time, the experience of the obsession to a large extent disrupted Ksawery's usual psychosocial activities.

This case and the most important conclusion which can be drawn from it deserve particular attention: namely, what the patient mostly focused on was the smell. Having analysed quite thoroughly various human sensations, I agreed with the patient on the conclusion that it is impossible to register (experience) current smells in any other way but by the sense of smell, which, in turn, cannot determine the disorders in the content of thoughts, as it belongs to the sensory sphere. Neither did the patient mention "the memory of the unwanted smell"; on the contrary, he clearly experienced the odour erroneously by the current sense of smell. Anxiety, mental analysis of his experience and compulsive movements were only secondary results of these olfactory errors.

# Case 2

Teresa, aged 56, has been suffering from OCD since her childhood, and started therapy only at the age of 55. Both her medical history and the current clinical picture indicated the occurrence of OCD underlain by the personality with anancastic features. Most of the patient's obsessions referred to the spheres of purity or cleanness and religion. Her everyday activities were defined

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by rituals related to washing, getting dressed, cleaning and moving. Teresa's personality was strong enough to dominate the family members, who - as often happens in the cases of chronic OCD - adjusted themselves to the anancastic rules imposed by the patient. The closest family members: husband and adult daughter moved around the flat in accordance with the patient's obsessive ideas, while their housework activities were determined by Teresa's orders and prohibitions. She herself was the only person allowed to do the cleaning and the washing up, as well as to cook or do some strictly defined shopping. The bedding used by the couple was specially prepared by the patient and the husband was not allowed to touch it after he had left the bed in the morning. The family members were obliged to perform a number of other rituals as well.

For years, the family have been functioning harmoniously in this anancastic rhythm imposed by the patient's powerful character; only sometimes was the patient's behaviour described as "strange" or "exaggerated". The decision to start a psychiatric treatment for obsessions was eventually triggered by Teresa's husband's cancer. The reason for the conflict within the family was fish. Teresa's husband particularly liked fish dishes, whereas Teresa's leading symptom was precisely anxiety caused by fish. This rarely encountered "fish obsession" had numerous pathological consequences. For years, the family members were not allowed to eat fish-based meals (this rule applied also to the Christmas period, although the patient is a very radical follower of the Catholic faith); they were forced to avoid both shops where fish were sold and animals which could have had any contact with fish (it applied especially to dogs' coat). What was particularly tiresome, Teresa found tap water especially dangerous, as she obsessively believed that it had been dirtied before by fish; hence, she would filter it (also before washing). Apart from psychodynamic interpretations of this ichthyological phobia, Teresa meticulously controlled her family members, being permanently suspicious that one of them had either secretly eaten fish or touched it at a fishmonger's. The greatest problem was the smell of fish slime, which caused Teresa's panic; she could smell it obsessively, and she would sniff it in her kitchen or on her husband's or daughter's hands. What is diagnostically important, Teresa was fully aware of the irrationality of her actions; still, the sniffing-checking ritual brought her temporary relief and alleviated her anxiety. When the seriously ill husband expressed a strong desire to eat a fish meal, the patient in her helplessness decided to begin a psychiatric treatment so that she can overcome the symptom and live in harmony with her husband.

#### Analysis of case 2

Like in the case of Ksawery, also in Teresa's case, one of the most troubling OCD symptoms was obsessions in the sphere of smells. Olfactory obsessions were of primary importance in the holistic picture of the anancastic syndrome. They were experienced as erroneous sensations of the sense of smell, which were always accompanied by the feeling of irrationality. Although the patient remained critical of her own actions, in the face of panic anxiety triggered by the "illusory" smell of fish slime, Teresa consistently performed her rituals since in this magical way she was able to temporarily relieve anxiety. As it is widely known, it is precisely the anxiety that accompanies obsessions which functions as the main factor triggering strange compulsions; it is common for obsessions related to both the sphere of thoughts and the sphere of smell. Chronic performance of olfactory rituals was made possible by the approving attitude of the family members who adjusted themselves to the rituals banning any contact with fish. In Teresa's case, like in the case of typical obsessions, the obsession/ritual led to some changes in the family system, which, in turn, increased the sense of anancastic power of the patient's personality.

When asked to assess the experience of this obsession as compared to others – i.e. typical intrusive thoughts, ideas or images – the patient found no differences. The EEG results were normal.

#### DISCUSSION

The cases described above illustrate very well the idea of sensory (smell) obsession. Significantly, these are not isolated or casuistic examples. Intrigued by patients' accounts, I have drawn up

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a working diagnostic questionnaire, including questions about olfactory obsessions in patients with diagnosed OCD who had already received treatment for it. It should be mentioned here that olfactory obsessions are not taken into consideration either in acknowledged medical classifications or in the questions of the Yale-Brown Obsessive-Compulsive Scale, which is the basic diagnostic questionnaire used for OCD [5].

# **METODS**

# **Diagnostic procedures:**

Inroductory diagnosis of OCD Completing the Yale-Brown Obsessive-Compulsive Scale

Number of points..... Intensity of obsessions.....

If more than 8 questions were marked, the diagnosis is continued by completing the questionnaire below:

A diagnostic questionnaire oriented at "sensory (olfactory) obsessions":

1. Have you ever experienced obsessive (recurrent, unwanted, tiresome) smell sensations:

No Yes

65

#### if yes:

2. What were these persistent smell sensations related to?

- a. dirt (give details):.....
- b. organic secretions: faeces, urine, sweat, other.....
- c. smell of animals.....
- d. smell of the body, clothes: sweat, breath, hair, outerwear, underwear, other.....
- e. chemical substances: perfume, soap, washing powder, petrol, exhaust fumes, industrial fumes, other.....
- f. food: fish, onion, garlic, other.....
- g. other obsessive smell sensa-

tions.....

3. Did you find these obsessive smell sensations unpleasant?

No

Yes

#### if yes:

4. How did you experience these smell sensations?

- a. thinking about this smell
- b. remembering this smell (which refers to memories)
- c. imagining this smell
- d. smelling this smell
- e. other (give details):....

5. In your opinion, were these smell sensations a real or an illusory experience?

- a. real b. illusory c. doubtful, I was not sure
- d. I do not know

6. Did you take any actions to check whether these smell sensations were "real"?

No Yes

if yes:

7. How did you check if they were real?

- a. I denied them in my thoughts
- b. I sniffed
- c. I checked by searching for the remains of the substance which could have caused this smell
- d. other, give details:.....

8. What do you feel when these obsessive smell sensations occur?

- a. irritabilityb. uneasiness
- c. anxiety
- d. tension
- e. shame
- f. I do not know
- g. other, give details:....

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# DISCUSSION AND CONCLUSIONS

On the basis of the cases described above (only two, due to the limited scope of this work) it can be claimed that the problem of obsessions is not limited to the disorders in the content of thoughts; on the contrary, it refers also to the sensory sphere, or, to be more precise, to the sense of smell. Characteristic features of such an olfactory obsession are exactly those typical for classic obsessions related to thoughts: the symptom is persistent, unwanted yet recurrent, in the end unpleasant, uncontrollable by the patient's will, connected with anxiety and leading to an appropriate compulsion which brings temporal relief. Significantly for differential diagnosis, the patient is critical of his/her obsessions, but although he/she is aware of the irrationality of the sensations (the insight can be limited), the ritual is repeated. It is a rather academic discussion whether the patients know that they smell an obsessive and unpleasant odour or whether they indeed experience a recurrent erroneous smell sensation; however, all patients described in this paper were quite positive that in this case – contrary to other obsessive sensations – they smelled rather than thought.

A reference to schizophrenia can help understand this phenomenon. If delusions can be the psychotic continuum of obsessions in the sphere of thoughts [6, 7], olfactory obsessions – per analogiam - seem to be related to olfactory hallucinations. Hence, the suggestion that all obsessions have their origin in disorders in the content of thoughts appears to be quite artificial, and it results in a false classification of the patient's sensations when the way he/she experiences them is taken into account. A contrary suggestion can be justified by obsessive images or impulses, typical for OCD, in the case of which patients are convinced that they see or imagine a given obsession (and not think about it), despite remaining critical of it and being aware of its irrationality.

To conclude, an attempt at distinguishing sensory (olfactory) obsessions is not quite pointless. Further research in this area can contribute to a better understanding of aetiopathogenesis of OCD, which is still quite vague; and in particular, of the biological conditions of OCD, which, according to the classic concepts, generally result from the disorders in the serotoninergic system [8]. The monoamine hypothesis, however, seems to be a considerable simplification of the understanding of biological basis of OCD. The hypothesis is contradicted not only by moderate effectiveness of SRI medication, which is recommended in the treatment of obsessions; it is also inconsistent with the findings of more recent aetiological researches, which suggest parallel dysfunctions in the dopaminergic system. Abnormal secretion of dopamine in the patient suffering from OCD can be one of the reasons for the development of obsessive smell sensations, similarly to the aetiopathogenesis of olfactory hallucinations in the course of schizophrenia [7, 9].

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