

BEHAVIOURAL CHANGES ASSOCIATED WITH MEDICAL PATHOLOGIES IN THE CAT

1. INTRODUCTION

Behaviour problems are a frequent cause of visits to the veterinary, and a very important factor when deciding to euthanize or abandon an animal. Figure 1 shows the most common ones, for which we will describe the main medical underlying causes. It is important to suspect of a medical condition when a behaviour issue occurs suddenly in adult or senior animals.

Glossary: feline lower urinary tract disease (FLUTD), feline idiopathic cystitis (FIC), feline orofacial pain syndrome (FOPS), cognitive dysfunction syndrome (CDS).

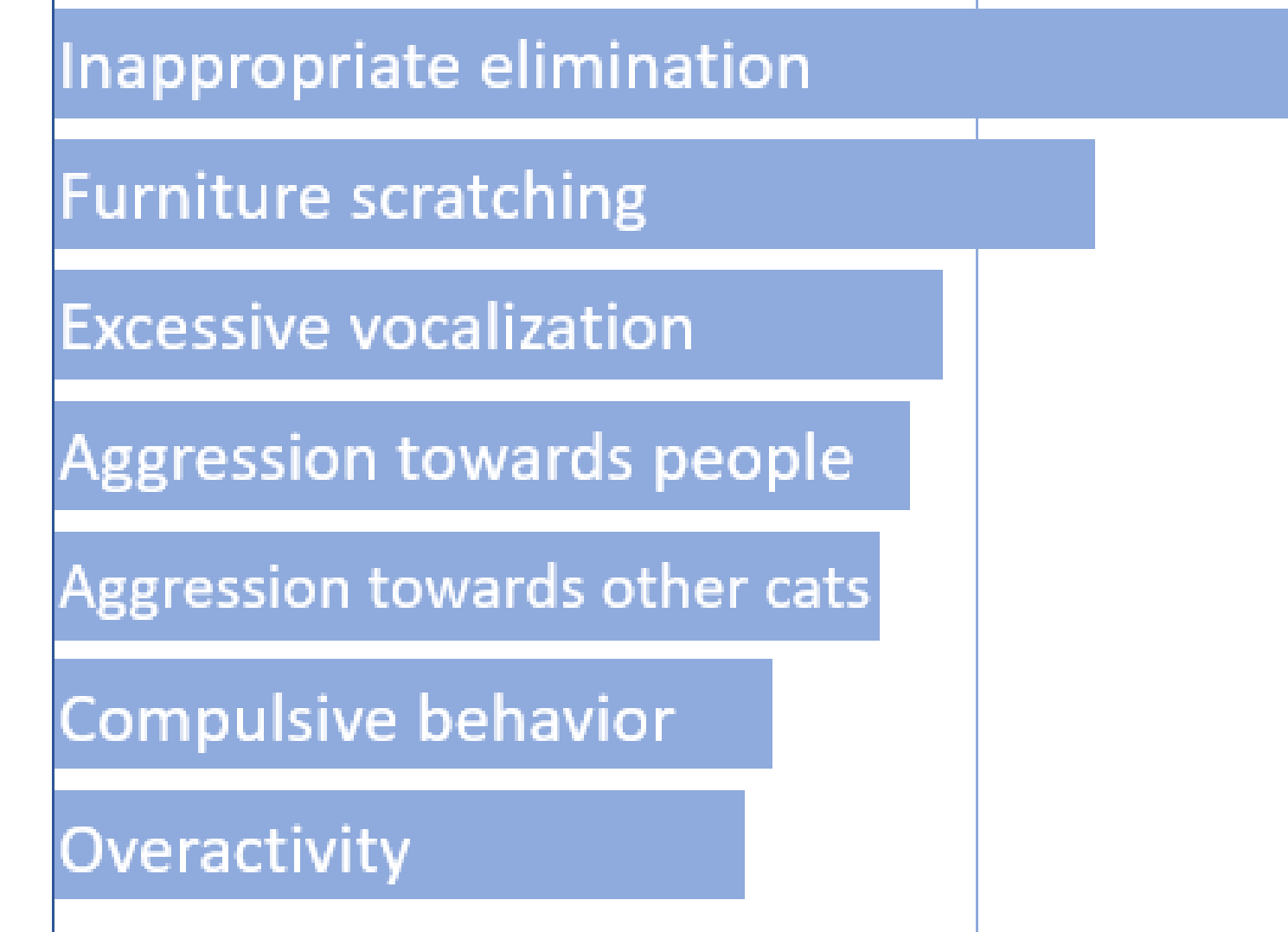


Fig. 1. Most frequent feline behavioral problems.

2. OBJETIVES

The main objectives are:

1. To list the main behaviour problems in the cat and relate them to possible underlying medical causes.
2. Establish a differential diagnosis of the main underlying medical causes.
3. Define some of the medical causes, because of their interest or relevance in the literature.

3. INAPPROPRIATE ELIMINATION

There are many medical causes that through different mechanisms can lead to inappropriate elimination (fig. 2). One example is FLUTD and FIC, where the latter represents the main cause of non-obstructive FLUTD and the second cause of obstructive FLUTD.

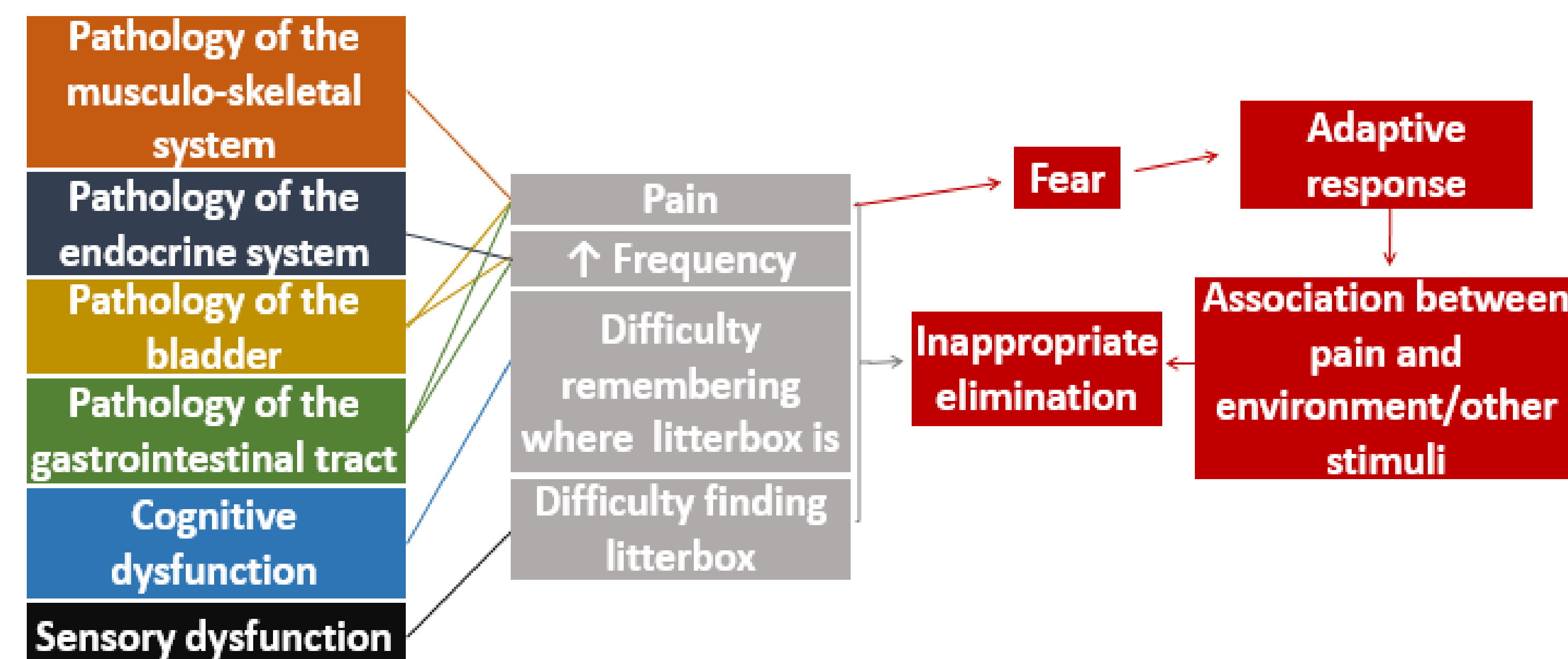


Fig. 2. Main medical causes of inappropriate elimination, related to the possible mechanisms of aversion to the litter-box. Particularly, it is important the link between pain, fear and inappropriate elimination.

4. AGGRESION

Aggressive behaviour in cats directly affects their welfare, while at the same time it is a potential danger to society. Multiple diseases have been described that can cause aggressive behaviour in cats (fig. 3).

Both aggression and inappropriate elimination may persist even after the primary medical cause has been resolved. This occurs because of associative learning (fig. 4).

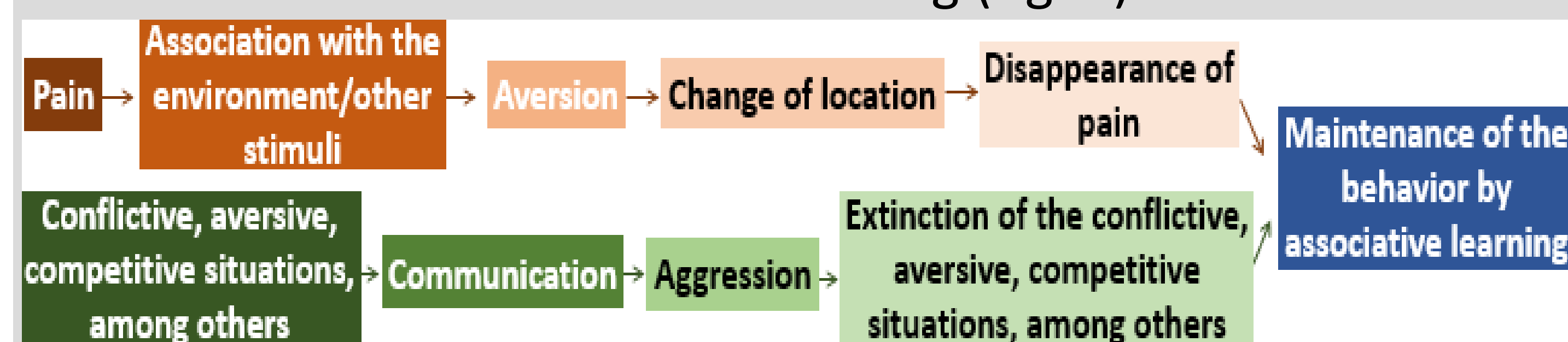


Fig. 4. Mechanism by which persistence of aggression or inappropriate elimination occurs in the cat.

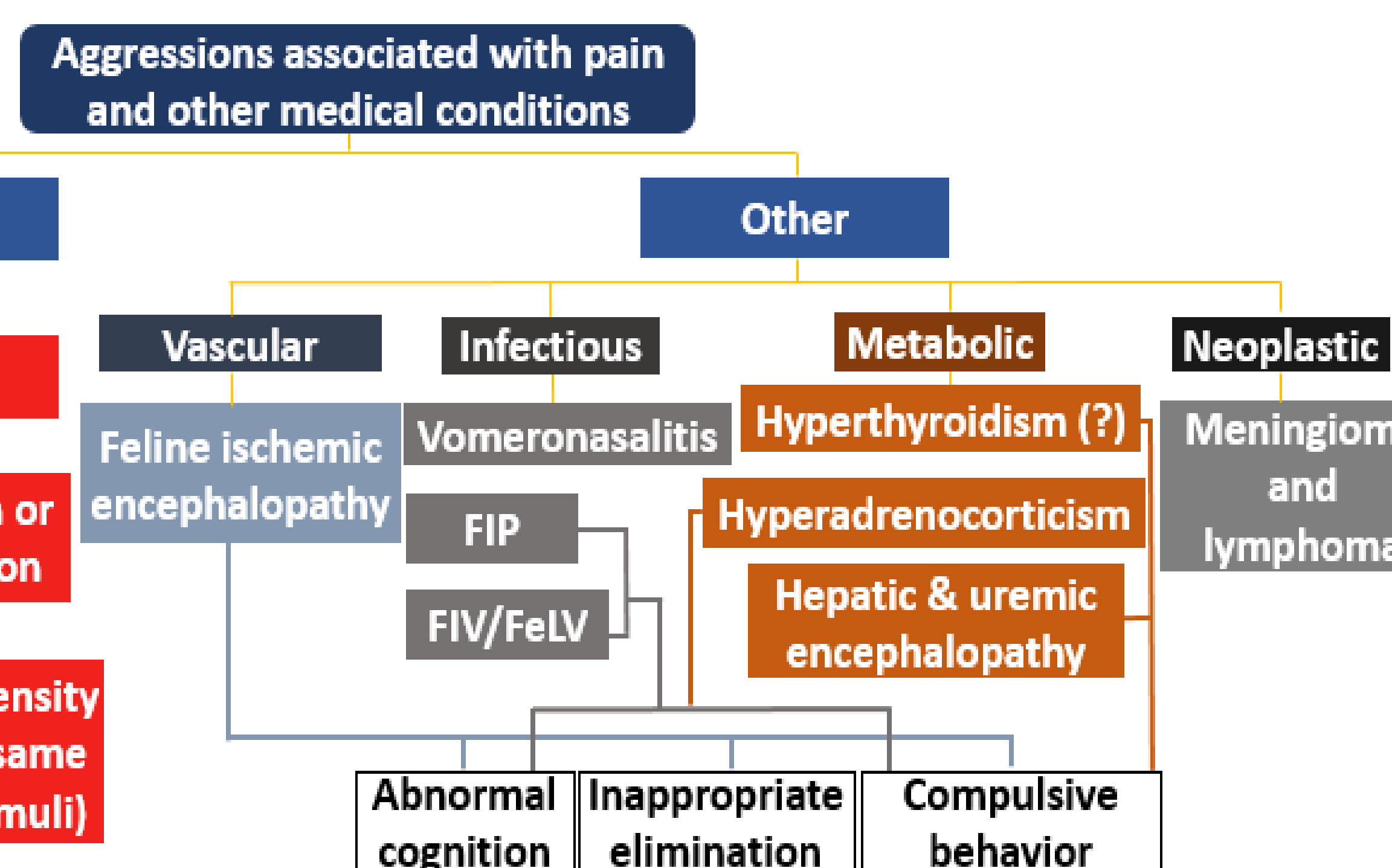


Fig. 3. Some differential diagnoses of aggression due to organic causes and mechanisms involved in pain. Possible relationships of these pathologies with the other behavioural problems mentioned are shown at the bottom.

*Feline infectious peritonitis (FIP), feline immunodeficiency virus (FIV), feline leukaemia virus (FeLV).

5. ABNORMAL COGNITION

Although there are different medical causes, CDS is becoming particularly important in recent years. Since it is diagnosed by exclusion, it is necessary to rule out other medical conditions (fig. 5). Possible causes are not yet known, but compromised cerebral flow and free radicals may be involved. However, this process is still unclear in the case of the cat.

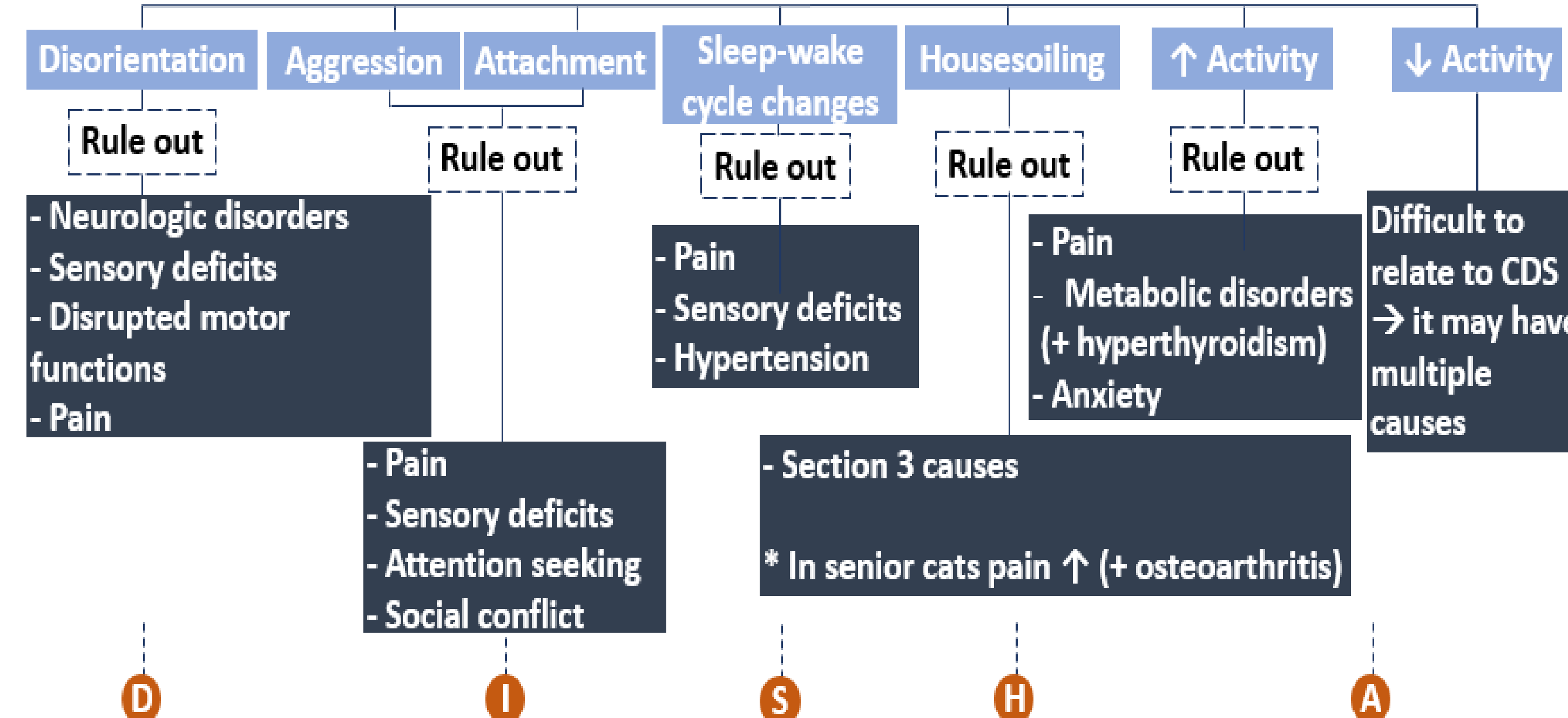


Fig. 5. According to the clinical signs summarized in the acronym DISHA, diseases to be ruled out when CDS is suspected.

6. COMPULSIVE BEHAVIOUR

Compulsive behaviours include a very heterogeneous group of behaviours that seem to have different causes. The most common ones are those related to grooming, self-mutilation and pica, whose main differential diagnoses, together with that of hyperesthesia, are shown in figure 6.

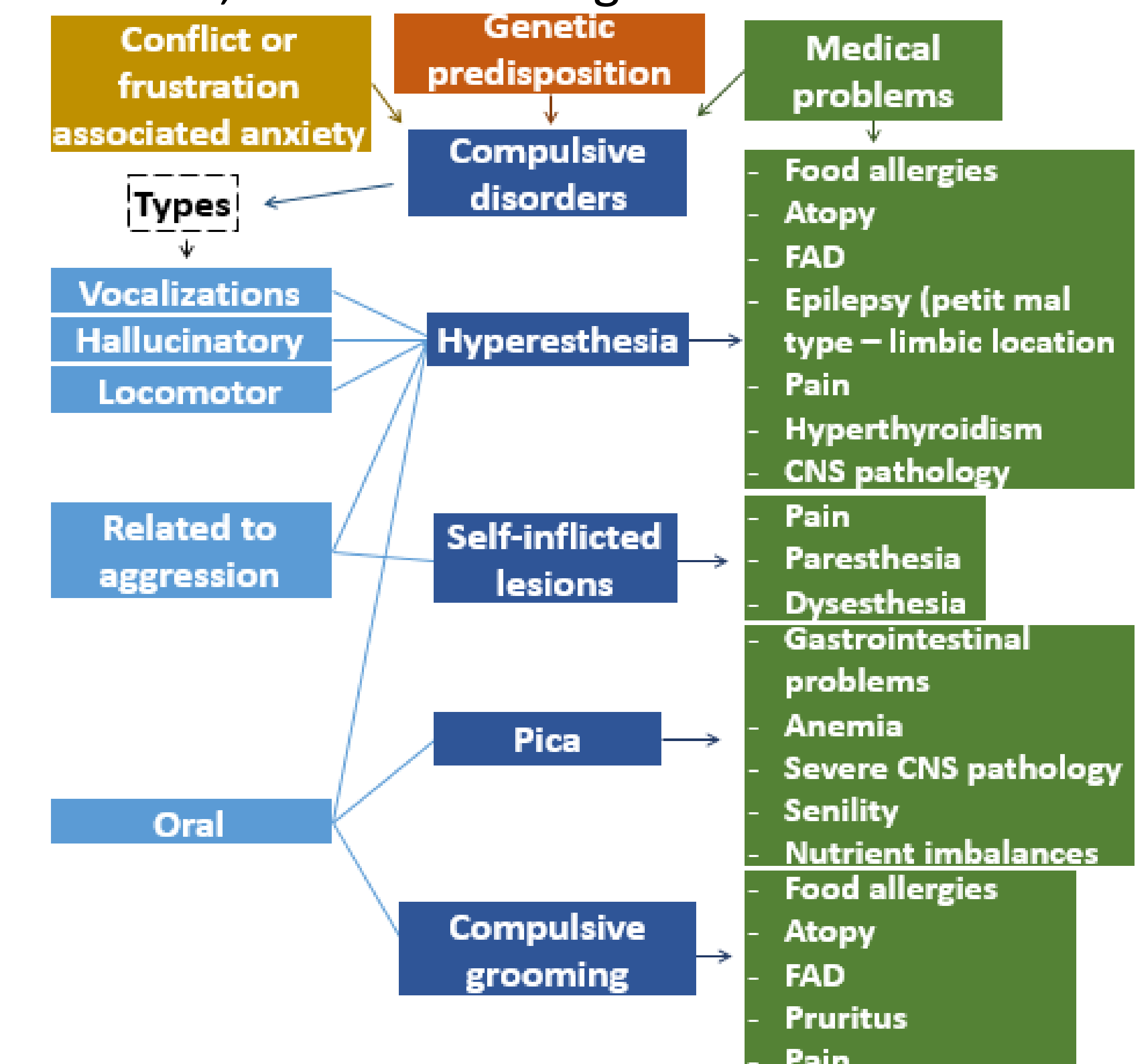


Fig. 6. Relationship between the possible causes of compulsive behaviours, types and main differential medical diagnoses.

*Flea allergy dermatitis (FAD), central nervous system (CNS).

7. CONCLUSION

- The main behavioral problems are inappropriate elimination, furniture scratching, excessive vocalization, aggression towards people and towards cats, compulsive behaviors and overactivity.
- Many medical causes may show more of a behavioural problem, such as vascular, infectious and metabolic causes of aggression, pain, CDS or allergies.
- It is important to know the differential diagnosis to distinguish between medical and ethological causes, and to learn mechanisms that can prolong these behavioural problems.