•Saint Catherina of Genua tribulations.

•An hystorical case of porphyria?

•Francesco D'Alpa (*Gravina di Catania, Italy)*

quando entrava a parlare de l'amore, talmente si accendeva che il corpo ne restava infermo, per che uscendo fuora di sé stessa, l'humanità restava in modo abbandonata, che con gran fatica si posseva repparare.
["*Vita mirabile*", 1551, foglio 132r]

•An accurate examination of the original biographical material on this saint of Catholicity is of great importance in demonstrating the relationship between religiosity and neuropsychiatric disorders.

•Psychiatric signs and symptoms are very frequent in the life of mystics, but psychiatric analys alone does not take account of all their clincal manfestations.

•In the oldest biographies of Saint Catherine of Genua (1447-1510), several clinical pictures have been described (psychiatric, cardiovascular, gastrointestinal and neurovegetative signs and symptoms; eating disorders; painful crises; a terminal jaundise), but interpreted as supernatural manifestations.

•Over time, many hypotheses have been made on her obvious anorectic behavior and on a possible psychiatric background (hysteria or bipolar disorder); but somatic symptoms widely described have almost always been neglected.

•According to Catholic tradition, Catherine has a rich, complex personality whose vital trajectory proceeds from a researching suffered phase to a mature, active creativity and expansiveness, to end with a full and conscious self-affirmation.

•Moreover, she shows, for long periods, clear signs of psychic discomfort: perhaps a bipolar disorder, simptoms of hysteria, anorexia. In every case, for many analysts, it is holy and admirable despite all this, and physical and psychological problems have contributed to spiritually affirming her.

•The few modern medical analyzes have focused almost exclusively on his terminal illness, perhaps considering the rest of the bodiy phenomena of limited interest in the general context, where the somatic and psychic disturbances could have suggested other diagnostic hypotheses.

•Today, partial and incomplete analyzes are costrasting: theological, psychological, psychiatric, and medical. The assessment of the impact on the personality of a medical problem with possible psychiatric implications must in any case precede any purely psychological or theological analysis: today the medical opinion is often required by the religious authorities when judging the sanctity of a probing, or of the supernatural nature of supposed miraculous events.

•In the case of Caterina, it is possible to use a documentation not even of first hand, but probably close to a fairly realistic account of many facts of his life. Those who witnessed the "operations" carried on his body were in fact totally confused, and for this reason they described them without excessive interpretative attempts. This make these descriptions at the same time an extraordinary history and a plausible objective examination.

•But what were Catherine's medical problems, and how could they have affected her life and her thinking? And to what extent did uninterpreted psycho-physical phenomena help to define his holiness? My retrospective analysis seeks to correlate one or more somatic pathologies and psycho-physical manifestations of various kinds.

•The point of departure is necessarily the final event of Catherine's life: a jaundise with gastro-intestinal and neurological sign and symptoms, as in the case of a primitive or secondary hepatic disease, may be a cancer, primitive or metastatic. But does this terminal disease have some correlation with Catherine's suffering in remote years? Is there a relationship between the "extraordinary" phenomena that progressively become more frequent and accentuated (fainting, burning, shedding, etc ...) and the more common phenomena referred to many years before? And what about the alleged "supernatural" manifestations observed in the last seven months of life: ecstasies, visions, supernatural communications? Do they have anything in common with the similar 'supernatural' manifestations of the "best years"? A clinical picture started decades ago, described as purely psychic (or possibly psychosomatic) as an expression of a process of spiritual perfection and as a manifestation of the divine, may have changed over time (and tumultuously in the latter weeks) in a similar syndrome with clear somatic predominance?

•A possible hypothesis is that all or most of these manifestations derive from a diffuse pathology with strong psychosomatic correlates, acting on the relationship between brain and mind. Such disease must be characteristic; it must have a fairly episodic clinical expression at its beginnings, then become more and more pervasive; it must be quite different from what know to the Catherine's physicians; it must justify certain effects of Caterina's life and alimentary regime and the unhappy outcome of some therapeutic attempts; and so on.

•The psychophysical portrait

•In Catherine's temperament there is clear evidence of bipolarity: first a long depression, then a period of expansivity, perhaps with hypomania tips, but also with obvious obsessive-compulsive and anorectic traits; and finally a long period of psychological relapse, with alternating depressive phases or exaltation. They are frequent, even outside the actual depressive crisis, experiences and feelings of depersonalization. But her religious culture makes these experiences not only suffered, but even like moments of mystical exaltation. This depersonalization is evident in the descriptions of his penitential phase. After one period of self-annihilation, Caterina is aftfeced from what in psychiatry has been termed 'theopathic state', in which depressive traits can be replaced by monoideism and hypomania.

•In the caterinian biography, all 'human' sufferings are so transferred on a spiritual plane: it is not the 'body' that causes the 'spirit' to suffer, but it is the Spirit who is inhuman to the Body, who mistreats it.

•But that it is nothing more than the hagiographic interpretation of a long illness, or a serie of physical illnesses, misinterpreting or deniyng the very nature of an organic disease; as if the spirit was the only determinant of physical well-being or physical illness.

•This disconnection between 'body' and 'spirit', between 'humanity' and 'supernatural' is at the center of a theological explanation of anorexia and, in general, of the sacrifice of all feelings and of the body.

•Among the various alleged mystical phenomena described in Catherine they are very interesting those of the so-called 'invisible stigmata': psychiatric or neuropathic rater than hysterical symptoms.

•A medical hypothesis: porphyria

•Leaving strictly religious material, the reading of the 'Corpus catharinianum' suggests some dconflicting interpretations of Caterina's sufferings.

•The first is 'psychiatric': almost all non-religious scholars have framed Caterina as anorectic, hysterical, or bipolar. Undoubtedly the 'Corpus catharinianum' support that, but it is also clear that only a medical illness may explain a physical failure lasting may be at least all the last thirteen years of her life, during which the assistance of several people became indispensable.

•Depending on the many descriptions in "Corpus catharinianium", the disabling pathology had to be neurological, cardiovascular and gastrointestinal, and certainly psychiatric. Ultimately, given the symptomatic close continuity, this disabling pathology has a relationship with the complex final disease.

•In the light of current knowledge and in comparison with such significant clinical histories, my hypothesis is that Catherine suffered from a rare genetic disorder of the porphyry group, of which there are many clues. A similar "retrospective diagnosis" had already been hypothesized in the case of the insania of King George III of England, Vincent Van Gogh and Jean Jacques Rousseau.

•Porphyria is a group of metabolic disorders caused by a partial deficiency of one or more enzymes involved in the synthesis of porphyrins. Increased levels of precursors of the eme triggers clinical crises, with a various combinations of neurovisceral, cutaneous, neurological and psychiatric manifestations, whose true cause often remains unrecognized for a long time, with serious consequences on therapeutic behavior. However, about 90% of carriers never develop acute attacks.

•The retrospective diagnosys of King's Georg III insania.

•One half century ago, the psychiatrists Ida Macalpine and Richard Hunter, on the basis of on an accurate reading of the clinical descriptions written by doctors who were interested in the health of the king George III of England, proposed to esplain its psychiatric manifestations to an intermittent acute porphyria (or acute variegated porphyria). This hypothesis has received many criticisms, but also the consensus of important scholars.

•Among the physical symptoms described for decades during the royal attacks they were: initially coughs and cold sensations, followed sometimes by pain; abdominal colic, with constipation; tachycardia; sweating; voice's alterations; painful weakness and stiffness of the limbs that make it impossible to walk; cramps; painful paresthesiae (hot or burning sensations); skin hyperesthesia (which makes it annoying to wear clothes); reduced sensitivity to pain. There are also generalized tremor episodes, convulsive phenomena, facial or nucal pain, dysphagia, vomiting, visual disturbances, nystagmus, dizziness, aphasia, sphincter incontinence. Occasionally, there are episodes of oliguria, polyuria or polydipsia, and cutaneous eruptions.

•Among the mental symptoms are: agitation states, moments where it speaks with extreme speed and vehemence, extreme sensitivity to light and sounds, emotional lability, behavioral inhibitions, night-time confusions, judgment errors, prolonged insomnia (in a case up to 72 hours). In the worst moments, characterized by great excitement and irritability, there are illusory phenomena and hallucinations. Outside these times, the king often exhibits wide behavioral oscillations even in the same day.

•The medical records of Caterina Fieschi

•The causa mortis of Caterina Fieschi was certainly a gastro-intestinal disease (probably a gastric or hepatic neo-plasia), not known by doctors of the time.

•However, its clinical history is quite similar to that of 90% of porphirics who, rather than acute crises, have incomprehensible symptoms and are labeled for decades or for lifetimes as 'psychiatric patients' whose troubled clinical histories have been shockingly recurrent in medical literature, and even more in their diaries. Some womens suffer during the menstrual period from addominant pains accompanied by vomiting, have respiratory difficulties, and are inexplicably anxious; or simply exhibit for years or decades an unhappy state.

•The biography of the Genoese clearly indicates the presence of an organic pathology, underlying its clinical and character manifestations; this disease precedes the appearance of the final event, probably a neoplasm, which may well be a complication or a final outcome.

•During her lifetime, Catherine has manifested many problems of medical-psychiatric interest, among which: a bipolar disorder; hallucinations; ecstatic / catatonic episodes; anorexia / bulimia; recurring crises with cardiovascular and psychiatric signs; persistent painful sensations ('fires', 'saette', etc.) over the course of several decades, with progressive aggravation; a progressive mental and psycho-physical decay in last years; at least one itteric episode many years before death; a progressive multi-organ dysfunction in the last few weeks of life; a cachettic death, in the presence of jaundise and hematuria, for possible gastro-intestinal neoplasia.

•According to Catholic interpretation, all these manifestations are clear signs of divine intervention.

•But the full history authorize the suspicion of a complex pathology with significant psychiatric repercussions.

•The jaundise spread throughout the body is an unmistakable sign of a liver disease; its rapid appearance first orients towards a biliar disease; his presence in other periods of life would instead turn toward a chronic liver disease. In Catherine's case, a 'saffron' coloring of the whole body was observed after death: a clear sign of obstruction of the bile ducts, generally due to the extension of a neoplastic process: may be an hepatic neoplasm, perhaps primitive, possibly due to a chronic liver disease. Certainly many years before his death Catherine had suffered from liver problems, commonly recognized in porphyria, mainly in its coproporphyric form).

•Furthermore, Catherine had followed for about 25 years a very weak food regimen, and this may have triggered acute porphyria crises, as well as aggravate hepatic dysfunction. Various concomitant stress factors may also have influenced the course of supposed porphyria: sleep deprivation, long prayers, unhappy matrimonial life, intense depressive episodes, perhaps infectious diseases.

•An important element in Catherine's diet was the use of disgusting substances such as Aloe (which may have helped hepatic metabolism, attenuating porphiric manifestations) and "Agaricus powder", which may have exacerbated psychiatric manifestations.

•The painful 'crises'

•Although porphyric neuropathy is predominantly motor, in a number of cases it may be predominantly sensitive, with distal paresthesiae, and sometimes a typically neuropathic pain (sometimes the only clinical sign of illness): one of the well-known causes of so-called "burning hand and burning feet syndrome".

•In this way, most of Catherine's sufferings may be explained in medical terms: sensations of heat, burning or fire; an inner flame; an external fire that surrounds her.

•Painful symptomatology must of course be differentiated by chronic syndromes, such as fibromyalgia, which is characterized by general symptoms (disorders of thermoregulation and sleep-wake rhythm, hypothyroidism, restless leg syndrome ...), cardiovascular (palpitations, paroxysmal tachycardia, orthostatic hypotension ...), hormonal (weight loss, hypoglycemia ...), gastrointestinal disorders (dyspepsia, irritable bowel ...), urological (interstitial cystitis ...), psychiatric (posttraumatic stress syndrome, anxious, bipolar disorder ...).

•

•References:

•D'Alpa F.: Una infirmità alli medici incognita. Lo strano caso di Caterina Fieschi Adorno, Laiko.it, 2016

•Libro de la vita mirabile et dottrina santa de la beata Caterinetta da Genoa. Bellono, Genova, 1551

•Macalpine I, Hunter R.: The insanity of King George III: a classic case of Porphyria. Brit. Med. J. 1:65-71, 1966

•