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Case report

CARDIAC SYMPTOMS THROUGH THE LENS OF A PSYCHODYNAMICS APPROACH: A CASE REPORT OF MYOCARDIAL INFARCTION

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INTRODUCTION

Despite having been in focus of psychodynamic perspectives for many decades, coronary symptoms are still a clinical challenge. We postulate a psychodynamic approach in a case of a myocardial infarction (MI) in a middle aged patient.

CASE REPORT

Mr. V, a 62-year-old married Caucasian, father of a middle-aged son, presented to the Emergency Department at University Hospital Centre Zagreb with chest pain. According to examinations and diagnostics he was diagnosed with non-ST-elevation myocardial infarction (MI) and admitted for coronary revascularization. He was seen by a psychiatrist within an ongoing clinical trial (ClinicalTrials.gov Identifier: NTC03841474) the day after the revascularization, therefore the explicit psychiatric indication was not present. The patient described pain started during the night before. He had similar sensations for four years but to a milder degree. He denied any ongoing psychological difficulties but was willing to participate in the study.

Mr. V described a traumatic childhood characterized by a 7-year out-of-home placement. He described his mother as being „incompetent for the motherhood role“, and he got institutionalized at the age of one. He was an illegitimate child without established paternity. He was not willing to talk much about his mother, saying „she clearly wasn't capable of having a child“. During the time spent in foster placement, he was often visited by his grandparents. He points out that they were like mother and father to him, idealizing them as loving caregivers. He described grandfather as strict, and grandmother as tender and mild. He related to her physical state by saying she too had heart problems in the form of paroxysmal arrhythmias. At the age of seven, he moved to his grandparents' house and entered elementary school. It remained unclear why the grandparents weren't able to take Mr. V before that time. According to the patient, they both died of natural causes. He didn't have the grades for secondary school, so he started working as a construction worker. Very soon he met his wife-to-be, resulting in prompt settlement. He described her as great support. For the longest period, he worked in a construction company. Despite achieving retirement status, he continued to work. His incomes were enough to provide for the whole family, so after a decade of living in rented accommodations, he started to construct a two-store family house: "For too long I was placed in one institution, I don't want to die in another one". It is noticeable that one week before the event, his investor stated he significantly lagged behind the schedule and that needs to make much better progress. „How come he doesn't like it now, and everything was fine before? I think he was nervous because his other investments didn't go according to plan, so he took it out on me.“

During the psychiatric interview sleeping disturbances, lack of energy, and loss of sexual interest were observed. He tends to rationalize his current psychological state, acknowledging only physical symptoms such as fatigue and dyspnoea. In sum, at presentation, Mr. V. suffered from mild depression with the tendency of somatization and rationalization.

PSYCHODYNAMIC FORMULATION

Children in out-of-home foster settings can experience turbulent changes through psychosexual development, that can either be traumatic or nourishing, depending on their previous experience with a caregiver. Compared with their peers, they are more likely to have parents with mental illness, to have been exposed to prenatal infection, and to have received unsuitable preventive health care (Halfon et al. 1992, Needell & Barth 1998, Chernoff et al. 1994, Curtis 1999). Placement changes can disrupt the child’s identity development due to deficient family management skills, such as harsh and inconsistent discipline, low levels of supervision, and lack of appropriate prosocial reinforcement (Kools 1997, Little et al. 2005). They experience psychological difficulties encouraged by feelings of rejection, guilt, anger, abandonment, and

shame (Katz 1987). Preexisting attachment problems may be further lingered by the uncertainties the foster care system carries (Goldstein et al.1979, Milan & Pinderhughes 2001, Leslie et al. 2005). Significant research on the impact of separation in out-of-home placement on child development has been conducted (Little et al. 2005). Some evidence suggests that contact with relatives reduces the length of separation and improves the endurance of re-unification (Bullock et al. 1998, Bullock et al. 2004). Although the experience can be very stressful, separation is rarely a sole factor in explaining impairment to development (Little et al. 2005). Placement disruptions often lead to education problems, increasing the risk of academic failure (Zima et al. 2000). Despite the poor academic outcome, our patient achieved self-realization with a sense of autonomy and authenticity. A symbol of his endurance and achievement is represented clearly in the house he had been building. The exposure to early adverse circumstances can result in compromised neural system function, which is responsible for stress reactivity and self-regulation. Therefore, there is a possibility our patient is biologically and environmentally susceptible to neurodamage. Dysregulation in stress response can further cause receptive to heart diseases.

It is thought that the essential etiological mechanism for coronary heart disease (CHD) is the chronic repression of anger impulses, which produces a chronic psychophysiological tension (Jordan et al. 2007). According to some authors, CHD is a result of repressed strong aggressive tendencies centered in a negative oedipal scene (Menninger & Menninger 1936). Our patient presented his grandfather as a substitute father figure. There must have been feelings of anger and disappointment caused by abandonment which caused the inability to completely resolve the emotional rivalry against his father (figure). Dunbar noticed that the heart diseases to which CHD patients were exposed occurred mostly in mothers. However, she adds, sudden cardiac events happened more often in males. The identification in our patient surely was very complex, as was the entire phallic phase. Our patient was exposed to grandmother's arrhythmias, showing his identification process specifics. The role of type A behavior (TAB) pattern on CHD development is still under focus (Kornitzer 1985). The findings demonstrate similarities between the characteristics of CHD related problems to psychodynamic constructs of unconscious impulse, defense mechanisms, and affective dysregulation (Duberstein & Masling 2000). However, the data of TAB directly affecting CHD has been ambiguous (Šmigelskas et al. 2015, Eysenck 1990). Alexithymia was greatly observed in our patient. It may additionally increase anxiety and stress and can be a predisposing factor to poorer social support and health-related quality of life (Nekouei et al. 2014). One study suggested that alexithymia is associated with the enhanced psychosocial burden of suffering CHD, hence this patient group may need more individual support and attention than other CHD patients (Valkamo et al. 2001).

Trigger for MI in our patient can be seen in the previous conflict with the investor. Self-realization through vocation abstained our patient's narcissistic tendencies. His need for success and dominance is predominant in stable life phases, but underlying unconscious wishes for care, security, and regression penetrate in periods of psychological crisis. The narcissistic destabilization can provoke aggressive tendencies which are often followed by feelings of guilt, which may then activate "masochistic" mechanisms and lead to dangerous physiological states that can trigger a MI. Many authors contributed to the psychodynamic context of MI occurrence. Some identified an early separation crisis as the cause of these mechanisms (Bowlby 1958). Our patient indeed experienced a lack of care and security. As a reaction formation, he developed the idea of early separation and autonomy, together with strong competitiveness and drive for success (Jordan et al. 2007). According to Baastian, MI usually occurs in moments when narcissistic injury and frustration in job activity concur with frustration in a libidinal relationship with partner, children, or friends. The observed libidinal decrease and investors' objections had a stressful impact on our patient's emotional life. Additional stress makes it hard to keep a secure position in the phallic position, so regression proceeds. However, the new position does not guarantee security and satisfaction, therefore psychosomatic paralysis may occur. According to Dunbar (1943) MI generally follows a situation in which the authority of the patient is threatened by his or her environment, so the patient feels humiliated or insulted (Dunbar 1943). The incident was precipitated by apparently irreparable mutilation of their picture of themselves through external threats to their authoritative role.

CONCLUSION

As seen in this patient, the complex psychodynamic interaction during childhood and recent stressful events predispose to disturbances in heart disease, leading to significant physical impairment, which underlines heart problems as psychosomatic disease. Treatment options should therefore be directed towards the resolution of the inner conflict, such as cardiac rehabilitation psychodynamic group intervention (Venuleo et al. 2018).

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Contribution of individual authors:

Sara Medved: manuscript writing and design of the study.

Darko Marčinko: literature analyses.

Joško Bulum: manuscript revision.

Alma Mihaljević-Peleš: manuscript preparation and revision.

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