

Chiari & Loneliness

Researchers at the CCRC have identified loneliness as a potential major issue for Chiari patients after surgery. Loneliness has received a lot of world-wide attention in recent years with the primary focus being on the elderly. Research has shown that loneliness and lack of social interaction has a demonstrable effect on health, causing chronic stress, weakening the immune system and even shortening life expectancy. This is the first study to show that loneliness has a measurable biological effect in Chiari patients after surgery. The researchers used data primarily from the Chiari 1000 to assess loneliness, depression, anxiety and pain on 62 adult female Chiari patients, some of whom had had surgery and some of whom had not. In addition, all participants provided multiple saliva samples to enable the researchers to track the levels of several stress related markers and hormones. In all they found that self-reported loneliness scores were significantly related to increased levels of cortisol and decreased levels of estrogen, but only in the subjects who had had surgery. Cortisol is released by the body to help respond to acute stress but is supposed to abate after a short period of time. Chronically elevated cortisol is harmful to the body and indicator of chronic stress. Estrogen on the other hand has been shown to have a protective effect and low levels of estrogen have been linked to chronic illness and even migraines. The researchers believe the fact that the loneliness effect was only found in the surgical group is a by-product of the surgical group having more severe symptoms than the non-surgical group. Anecdotally, many patients report that their families and friends question whether they are really sick and suffering and have trouble maintaining friendships and making new connections. This study emphasizes the importance for Chiari patients to fight against the temptation to self-isolate and for the medical community to develop ways to address this aspect of post-surgical Chiari care.

Source: Impact of Surgical Status, Loneliness, and Disability on Interleukin 6, C-Reactive Protein, Cortisol, and Estrogen in Females with Symptomatic Type I Chiari Malformation. Garcia MA, Li X, Allen PA, Delahanty DL, Eppelheimer MS, Houston JR, Johnson DM, Loth F, Maleki J, Vorster S, Luciano MG. *Cerebellum*. 2021 Mar 6.

Conquer Chiari's research updates highlight and summarize interesting publications from the medical literature while providing background and context. The summaries do contain some medical terminology and assume a general understanding of Chiari. Introductory information and many more research articles can be found www.conquerchiari.org