Chronic Hypersensitivity Disorders in the Post-Essure Era

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Background
Since 2001, over 750,000 women have undergone hysteroscopic sterilization with the Essure device. Though it is a minimally invasive and cost-effective sterilization procedure, a significant proportion of long-term adverse effects including chronic pelvic pain, abnormal uterine bleeding, and necessity of invasive gynecologic surgeries to remove fragments of Essure inserts have led to FDA withdrawal of Essure from the US market. More recently, many women have individually reported chronic hypersensitivity disorders presenting with post-Essure autoimmune-like reactions. Essure inserts contain a combination of polyester fibers, nickel, titanium, platinum, silver-tin and stainless steel with no reliable tests to anticipate which patients will develop a hypersensitivity reaction. Despite media attention broadcasting the possible complications following placement of the device, there is still limited medical knowledge of post-Essure sequelae. To our knowledge, we describe the first case series of chronic hypersensitivity disorders in women with Essure device and symptom resolution after its removal.

Objective
To describe a case series of chronic hypersensitivity disorders in women with Essure device and symptoms resolution after its removal.

Methods
A retrospective review was performed including women who exhibited chronic hypersensitivity and autoimmune-like symptoms after Essure placement followed by Essure removal from 2017-2019.

Results
Three women with varying symptoms ranging from perioral dermatitis, onset of chronic headaches post-Essure placement, and fronto-temporal balding were identified. Women had reported onset of clinical symptoms within one month of Essure placement. All women were evaluated by a multi-disciplinary medical team of dermatologists, neurologists, and allergists. Symptoms were suggested to be related to the Essure coil material. Due to persistence of symptoms, all three women elected to undergo surgical removal of the Essure device. Removal of Essure device was performed via laparoscopic bilateral salpingectomy with cornual wedge resection in two patients and a supra-cervical hysterectomy in one woman. All women reported improvement or complete resolution of allergic symptoms within 3 to 4 weeks of Essure removal.

Conclusion
Although Essure is an overall safe and effective alternative for permanent female sterilization, severe long-term sequalae have impacted many women. Health care providers must be made aware that chronic pelvic pain is not the only symptom in the post-Essure era and be aware of rare hypersensitivity reactions that may ensue mimicking autoimmune or autoimmune-like disorders. Surgical removal of the device should be considered as an effective strategy for treatment of Essure-related allergic reactions to improve patient satisfaction and quality of life.