'Asymbolia for pain' (AP) has shown the potentiality of diseased insular networks to dissociate sensory from affective-behavioral dimensions of pain, resulting in the lack of appropriate motor and affective responses despite preserved sensory aspect of pain.

Hagiwara et al. described 4 patients with an inverse phenomenon of AP, namely an isolated 'symbolism for pain' (SP) triggered by epileptic seizures, characterized by pain behavior without declarative pain sensation despite fully-preserved contact and vigilance. Stereoelectroencephalography demonstrated in each case focal seizure discharges within the posterior insulo-opercular cortex, with little or no propagation to other cortical structures, especially those thought to drive subjective pain experiences. The pain behavior might reflect seizure propagation from the insula to brain networks serving for behavioral responses associated with pain, including the cingulate motor region and possibly also the basal ganglia. Hagiwara proposed that the isolated SP is a novel epileptic syndrome of dissociation between pain perception and behaviors associated with the insular nociceptive-related networks [1].

1)
Hagiwara K, Garcia-Larrea L, Tremblay L, Montavont A, Catenoix H, Rheims S, Guénot M, Isnard J. Pain behavior without pain sensation: an epileptic syndrome of “symbolism for pain”? Pain. 2019 Nov 14. doi: 10.1097/j.pain.0000000000001741. [Epub ahead of print] PubMed PMID: 31738227.