



Guillain-Barre syndrome

- Guillain-Barre syndrome is a rare neurological disorder.
- It is a condition in which the immune system attacks the nerves.
- It happens when your immune system responds abnormally and attacks your peripheral nerves
- It leads to symptoms like numbness, tingling and muscle weakness that can progress to paralysis.
- Causes muscle weakness and difficulty breathing and swallowing.
- The cause of this disease is not clearly stated, but it is common in people who have recovered from bacterial or viral infections, have been vaccinated, or have undergone major surgery.
- It is said that when this condition occurs, the body's immune system becomes very active, paralyzing the nervous system.
- This disease is likely to be caused by bacterial infections caused by contaminated drinking water and eating unhygienic food.
- Diarrhea, abdominal pain, and sudden weakness in the arms and legs are the main symptoms.

The Copper Age of the Indus Valley and the Iron Age of Tamil Nadu

- The Indus Valley Civilization was proven to be 5300 years old a hundred years ago.
- In this situation, an analysis of a clay pot and a charcoal taken from it, which was excavated during the excavation of Sivakalai located on the banks of the Thamirabarani River in the Thoothukudi district of Tamil Nadu, has now revealed that its antiquity is 5300 years old.

Archaeological treasure

- Sivakalai is not as well known as Adichanallur and Korkai, the major archaeological sites of Thoothukudi district.
- In 2018-19, a teacher from Sivakalai, Manickam, had reported to the Tamil Nadu Archaeological Department that numerous archaeological remains were found on the surface of a 500-acre plot of land called Sivakalai Parambu.
- This appeal was immediately heeded and it was only when they went there to inspect it that they discovered that it was an archaeological treasure.
- Excavations have been underway there since 2019. There, ancient habitation areas and burial sites are found side by side.



- The Tamil inscription on a pottery sherd unearthed in the first phase of excavations revealed that it was written as "Aadhan".
- It is no coincidence that the same letters "Aadhan" were inscribed on a pottery sherd discovered at Keezhadi.

The paddy sample collected from the urn dated back to 1155 BCE. Previously, the paddy sample collected from the urn of Adichanallur dated back to 1200 BCE

Prosperous Iron Age

- The samples collected in Sivakalai have been analyzed and their age has been estimated to be between 1284 BC and 3345 BC. That means people lived 3200 years ago from today.
- Many other objects, such as iron swords, spears, and anchors, have also been found here.
- It has been proven that the Iron Age flourished in Tamil Nadu from the first part of 4000 BC.
- Apart from Sivakalai, the use of iron in the areas of Adichanallur, Vallam, Mangadu, Mayiladumparai, and Kilnamandi has been estimated to have been from 1030 BC to 2522 BC.
- For other parts of India, the time estimates so far have been from 980 BC onwards. Among these, the most ancient are the predictions of Kachipalle (Telangana) BCE 2200, Brahmagiri BCE 1940, Muski BCE 1895, Gufkral (Jammu and Kashmir) BCE 1850, and Royapura (Madhya Pradesh) BCE 1720.
- The first three ancient sites are located in South India.
- The oldest archaeological sites in the world where iron was smelted are in Anatolia and the Caucasus regions. This discovery occurred in the late 2nd millennium BCE, around 1300 BCE.
- Sivakalai has established that the Iron Age in the world began in India, especially in Tamil Nadu.

Significance

- Iron smelting technology is important in iron use. Must be able to set up furnaces that generate heat above about 1300 degrees Celsius
- It was only after learning this that iron agricultural tools and weapons, as well as goods for human use, were mass-produced.
- Agriculture flourished and empires emerged, which is why the Iron Age is considered a historical revolution in human history.
- Just as iron accelerated the development of human civilization in ancient times, it was also a key factor in bringing about the Industrial Revolution.
- Although ancient iron furnaces have been discovered in many places in Tamil Nadu, the iron furnaces discovered in Kodumanal and Mayiladumparai are the largest.
- The Mayiladumparai ironworks are estimated to be 4000 years old.