IIT-M develops indigenous portable ultrasound scanner for sports injury diagnosis

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This AI-powered device could potentially allow for on-field diagnosis of injuries

A team of researchers at the Indian Institute of Technology Madras (IIT-M) has developed an indigenous portable Point-of-Care-Ultrasound (POCUS) Scanner for sports injury diagnosis and management. They have already been granted several patents for technologies that went into this device and are working towards productisation.

This research from the Center of Excellence in Sports Science and Analytics (CESSA) at IIT Madras could potentially allow for on-field diagnosis of injuries, immediate assessment of the extent of injury that will allow for medical professionals to take a call on whether to permit the sportsperson to continue playing.

This Artificial Intelligence-powered POCUS scanner has a wide range of applications in sports medicine, and it has the benefits of safety (no radiation) and sufficient resolution compared to other modalities.

A working POCUS prototype for Musculoskeletal (MSK) imaging, developed at the Biomedical Ultrasound Imaging Lab (BUSi) is currently ready. The researchers are targeting to complete the product prototype development by 2024. Subsequently, testing and collection of pilot data from the field are also being planned in coordination with Sports Authorities.