• This is a prospective study in which we evaluated MRI-US fusion technology and its applicability in musculoskeletal sports injuries.
• We evaluated 20 subjects, non-injured and injured athletes and describe anatomic landmark for fusion, advantages and disadvantages.
• The main advantages of fusion technology applies to educational purposes, follow-up of soft tissue injuries in special deep muscles and tendons, navigation within the MRI and guided procedures.
• The main disadvantages are that high quality MRI image is essential in achieving an adequate fusion image, and 3D sequences need to be added in MRI protocols to improve navigation.
• More research is needed in specific musculoskeletal sports injuries.