

Introduction

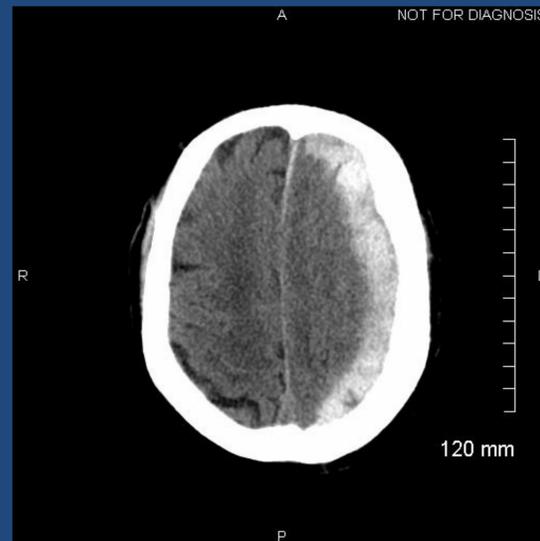
A subdural hematoma is a collection of blood outside of the brain in the subdural space. The subdural space is located between the dura mater and arachnoid membrane.^{1,2} Subdural hematomas are often caused as a result of direct trauma to the head such as motor vehicle accidents and falls.³ Computer tomography (CT) and magnetic resonance (MR) are the modalities of choice to diagnose subdural hematomas as presented in the following case study.^{1,3}

References

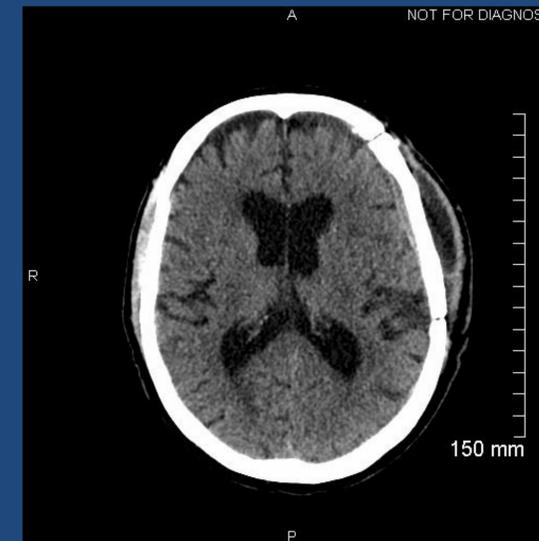
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Computed Tomography

CT is the undisputed modality of choice for initial imaging of subdural hematomas because of its ability to quickly determine the need for surgical intervention.^{4,8}



A 15 mm subdural hematoma was found on a patient presenting with history of a fall. Midline shift as a result of the hematoma is also present requiring the need for a craniotomy to be performed.⁵



Axial CT image post craniotomy shows reduction in size of the subdural hematoma to 5 mm. The smaller subdural hematoma is difficult to see due to the blood being of similar appearance to bone.⁶

Magnetic Resonance

MR is better suited over CT for imaging small subdural hematomas because of the high image contrast between the hematoma and the adjacent bone.^{3,4,8}

Post craniotomy axial MR image on the same day as the above post CT allows for greater appreciation of the remaining subdural hematoma.⁷



Conclusion

Rapid diagnosis is of extreme importance with subdural hematomas because of the possibility for surgical intervention. Diagnosis uses both CT and MR depending on the situation.¹ Surgical assessment for subdural hematomas is determined through the speed of CT scans. Smaller subdural hematomas following a craniotomy are better visualized with high image contrast as seen in MR.^{1,8}

References

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