



Teardrop sign

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Abstract

We have submitted an interesting image of teardrop sign on prostate MRI.

Keywords Teardrop · Benign · MR prostate

‘Teardrop sign’ seen in multiparametric MR imaging of the prostate is the presence of central teardrop-shaped area of low signal intensity on T2-WI at the base/middle of the prostate (Figs. 1, 2). The clinical significance of this sign is this can mimic cancer. These symmetrical areas can show diffusion-restriction, early enhancement on dynamic contrast imaging, and misinterpreted as PIRADS 4/5 according to PIRADS v.2. Careful correlation with the coronal T2-weighted sequence, triangular configuration, and continuity with the central zone can correctly score this pattern into 2/5, excluding the presence of cancer [1, 2]. Teardrop-like sign is a variant of teardrop sign in which central teardrop hypointensity is due to protruding BPH nodule below the verumontanum while teardrop is always above the verumontanum located in the midline posteriorly.

Histologically, the low signal intensity reflects the compressed central zone between the hypertrophied transition zone and peripheral zone. Thus, identification of the ‘Teardrop sign’ is important to differentiate from prostate cancer.



Fig. 1 Downloaded from <https://www.123rf.com/stock-photo/teardrop.html?sti=mov4mbbx8ebc2mrv93>

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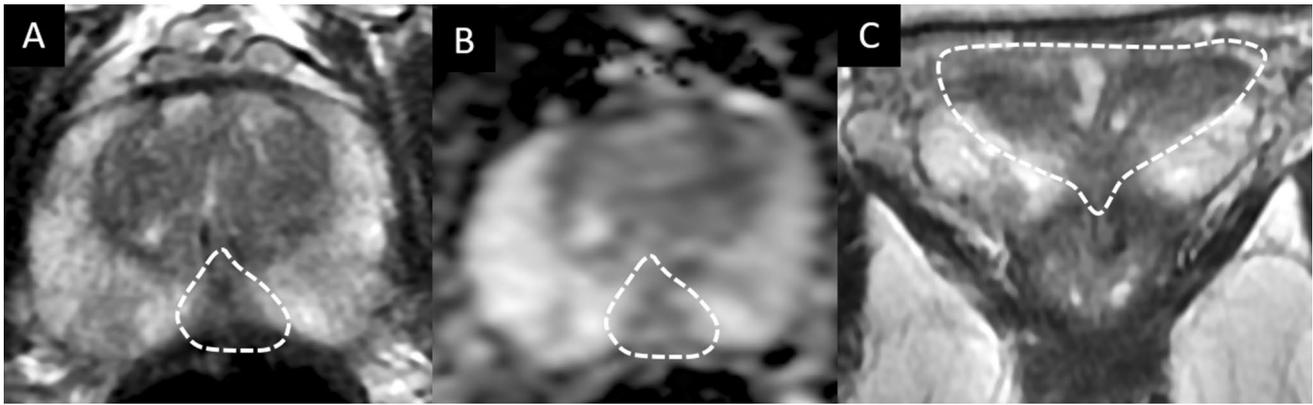


Fig. 2 Axial T2-weighted image shows a triangular hypointense area (dashed circle) at the peripheral zone in the prostate base (**a**) which shows low signal (dashed circle) on the ADC map (**b**). Coronal

T2-weighted image showing this teardrop-shaped hypointense area (dashed circle) merging with the central zone (**c**). This set of appearance has been called the “teardrop sign”

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Informed consent Informed consent was obtained from all individual participants included in the study.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interest.

Ethical approval All procedures performed in studies involving human participants were in accordance with the Ethical Standards of the Institutional and/or National Research Committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards. This article does not contain any studies with human participants performed by any of the authors. This article does not contain any studies with animals performed by any of the authors. This article does not contain any studies with human participants or animals performed by any of the authors.

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