

BACKGROUND

Inattention blindness is an important aspect of cognitive psychology and visual perception to understand in the emergency setting as it relates to workplace efficacy.

The focus of emergency radiology in immediate and life threatening issues can lead highly concentrated focus and thus inattention blindness with unexpected findings or outcomes. This can have serious impacts on patient treatment and care as well as potential medical-legal consequences.

Understanding and awareness of inattention blindness can help to reduce delayed or missed diagnosis, and lead to improved patient care.

PURPOSE

We discuss the Invisible Gorilla study conducted by Chabris and Simons how the concept of inattention blindness can be applied to radiology in the emergency setting.

METHODS

The Invisible Gorilla Study involved a video where participants were asked to count the number of basketball passes made by a group of players, however a person dressed as a gorilla passes through the scene. Participants routinely fail to notice the gorilla as they experience inattention blindness.

Radiologists can experience this inattention blindness both with unexpected imaging findings when attention is directed elsewhere, but also with literal gorillas placed into the CT scans as demonstrated by Drew et al.

RESULTS

Fig 1. Inattention blindness



Inattention blindness in the emergency setting can have serious impacts upon patient care. This can be in the form of missed or delayed diagnosis, which may result in adverse outcomes and/or medico-legal consequences.

Intense concentration may be required for the practice of emergency radiology, however this extreme degree of concentration can result in a lack of perception to everything outside of field of focus.

RESULTS CONTINUED

Drew et al. further examined this effect in radiology and demonstrated that in order to identify an unexpected finding that finding should still have similarity to the primary task at hand rather than spacial proximity. This highlights how the intense focus on critical emergency radiology findings can cause a miss when the finding has different, and potentially non-emergent, imaging characteristics.

CONCLUSIONS

Focus of attention is critically important in emergency radiology for timely and accurate identification of emergent findings. However the potential for inattention blindness must be recognized, and can be combated by opening the field of focus to findings of different imaging characteristics. By maintaining an awareness of inattention blindness the efficacy of emergency radiology can be improved as can patient care.

REFERENCES

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