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Wavefront-obstacle interactions and the initiation of reentry in excitable media

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Highlights:

- The proper rhythm of cardiomyocyte's constrictions can be broken by the obstacles.
- Electrical patterns resulting from the wavefront-obstacle interaction are studied.
- The resulting interaction can give rise to reentry and spiral waves.
- The obstacle towards the direction of wave propagation causes spatial deformation.
- The continuity of successive plane waves, in turn, determines the spatial patterns.

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