

## **INITIAL EVENTS ON CALCIUM IONOPHORE INDUCED EGRESS OF *TOXOPLASMA GONDII***

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*Toxoplasma gondii* egress still is the least understood stage of the cellular cycle of this protozoan. In this work, parasite egress from LLC-MK2 cells infected with the RH strain of *T. gondii* was artificially triggered with 4BrA23187 calcium ionophore. First events of the egress were studied by videomicroscopy, showing that upon calcium ionophore administration parasite rosettes disassemble, the contour of the parasitophorous vacuole disappears and each tachyzoite takes a separate route to the extracellular medium. FESEM and TEM showed the fragmentation of the intravacuolar network, the fragmentation of parasitophorous vacuole membrane and individual tachyzoites with extruded conoids migrating through the cytosol. Taken together, the data obtained from videomicroscopy, field emission scanning electron microscopy (FESEM), and transmission electron microscopy (TEM) indicate that egress does not result from host cell rupture due to overloading with tachyzoites. It starts with parasites escape from the parasitophorous vacuole and plasma membrane rupture is a secondary stage.