Yes, T cells can adapt to their environment well and use different sorts of migration modes. These are a few papers I can recommend:

<https://pubmed.ncbi.nlm.nih.gov/11097216/>

<https://www.nature.com/articles/nature06887>

<https://www.sciencedirect.com/science/article/pii/S0955067409001148>

<https://www.nature.com/articles/nri.2015.16>

<https://www.nature.com/articles/s41586-019-1087-5>

<https://www.nature.com/articles/nri3641>

<https://www.nature.com/articles/s41586-020-2283-z>

I am still segmenting data sets and hopefully can send you more of them next week.

In quite a few of the data sets I generated the uropod is rather static. Most people think the uropod is mainly contracted when the cell has to move through narrow regions in which the nucleus becomes the “limiting factor” and has to be squeezed through confined space. Our gels are rather soft and the pore size is not that small as compared to the cell size, so I guess there is not much squeezing required. However, there are also some examples in which the cells continuously change the shape of their tail.

The cells you are looking at are effector CD8+ T cells, they have already been in contact with their cognate antigen.

Text

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