

#128 NLRP3/IL-1 β Mediates Changes in Urothelial Muscarinic Receptors M2 and M3 during Bladder Outlet Obstruction in Rats



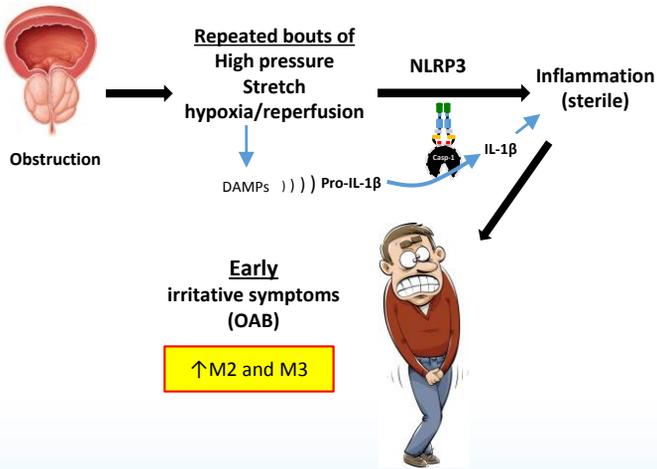
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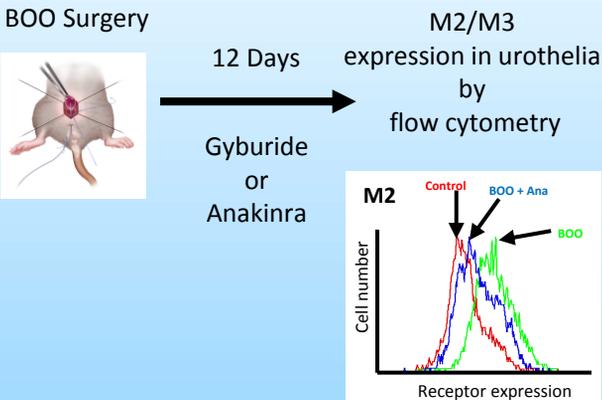
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Hypothesis/Aims

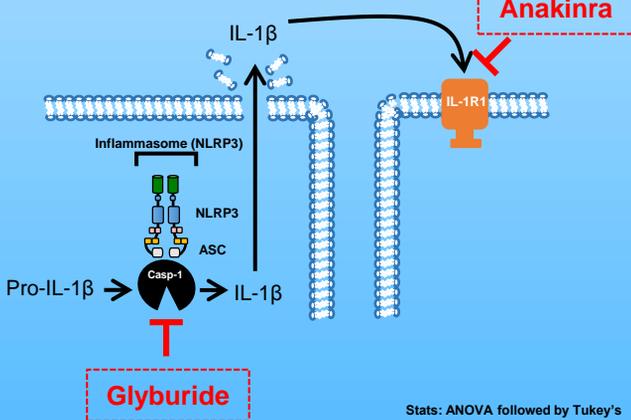
NLRP3 upregulates M2 and M3 during BOO



Study Design/Methods

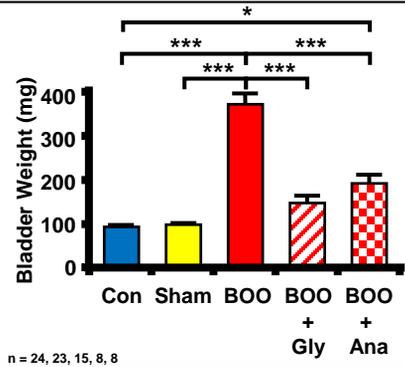


Location of Inhibition

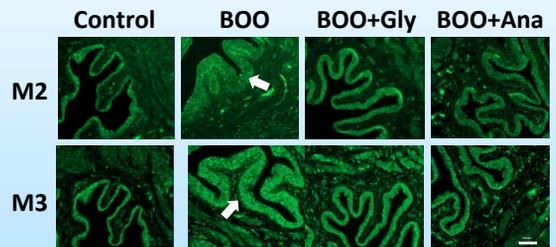


Results

- Bladder weight (inflammation) is increased during BOO
- Glyburide or Anakinra blocked this increase

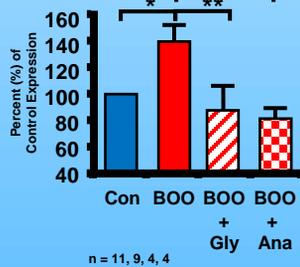


- M2 and M3 are expressed in urothelia
- Glyburide nor Anakinra changed distribution

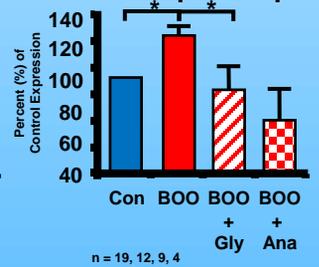


- M2 and M3 expression is increased during BOO
- Glyburide or Anakinra blocked this increase

M2 Expression

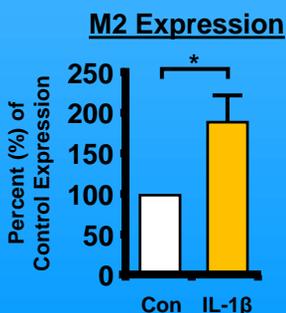


M3 Expression



Conclusion: NLRP3 regulates urothelial M2 and M3 expression during BOO

IL-1 β upregulates M2 expression in urothelia *in vitro* (flow cytometry)



Proposed IL-1 β Autocrine Loop in Urothelia

