March. 3, 2026

Health Rounds: Researchers find cellular clues to explain faster pain recovery in men

Feb 27 (Reuters) - The immune systems of men appear to be better equipped to shut down pain, which could explain why chronic pain is more common in women, research in mice and humans suggests.

Certain monocytes - a type of immune cell - produce an anti-inflammatory protein called interleukin-10 that "turns off" pain signals from nerve cells, study leader Geoffroy Laumet of Michigan State University reported in Science Immunology.

In injured mice, higher numbers of IL-10-producing monocytes were seen in males than in females, and the males had faster resolution of pain after injury, the researchers reported.

Separately, among 245 humans recovering from injuries, resolution of pain was faster in men than in women and was associated with higher levels of monocytes and IL-10 in the men.

Giving testosterone pellets to injured female mice whose ovaries had been removed increased their IL-10 levels and sped up pain resolution.

In male mice whose testes had been removed, resulting in lower testosterone levels, IL-10 levels dropped and resolution of pain after injury was delayed. Slower resolution of pain in women increases their risk of transitioning to chronic pain, the researchers noted.

The next step is to investigate how treatments could target this pathway and boost IL-10 production. “This opens new avenues for non-opioid therapies aimed at preventing chronic pain before it's established,” Laumet said.

EXPERIMENTAL DRUG TARGETS MUTATION THAT MAKES TUMORS AGGRESSIVE

An experimental drug being developed by PMV Pharmaceuticals in early testing corrected a genetic mutation that contributes to aggressive, uncontrolled cancer growth in roughly one of every hundred tumors, researchers reported.

The drug, rezatapopt, targets the Y220C mutation in the p53 gene and restores its tumor-suppressing functionality, according to a report of the phase 1/2 trial in The New England Journal of Medicine.

Still, among the 77 volunteers in the trial with advanced cancers that were not responding to other treatments, the researchers saw tumor disappearance or shrinkage in some of those whose tumors had the Y220C p53 mutation but no mutations in a different gene called KRAS associated with a better prognosis.

In this subgroup, disappearance or shrinkage of tumors was seen in 20% overall and in 30% of those who received one of the higher tested doses.Confirmed responses were seen across multiple tumor types, including ovarian and breast cancers, the researchers found.

FEWER OB/GYNS AVAILABLE WHERE ABORTIONS ARE PROHIBITED
U.S. state laws designed to limit access to abortions are resulting in reduced access to obstetricians and gynecologists, according to a new analysis.

Data collected between 2010 and 2021 show that so-called Targeted Regulation of Abortion Providers laws have been associated with a reduction of more than 2 obstetrician-gynecologists per 100,000 females of reproductive age, researchers found.

The reduced supply of obstetricians and gynecologists has not been met by corresponding increases in midwives, nurse practitioners, and physician assistants who practice women's healthcare, researchers reported in Health Economics.

“These findings reveal that abortion restrictions can have much broader effects on maternal healthcare access, raising important considerations for policymakers and healthcare systems nationwide,” Quan Qi of the University at Albany, State University of New York, who led the Health Economics study, said in a statement.