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Overkill?

🗂 June 14, 2017 🛔 Bryn 🕒 CRISpR, HPV, technological imperative 📝 Edit

Blog

Chercheuse en résidence / Scholar in Residence

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Publié/Published: 14 Jun 2017

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Conflit d'intérêts	Conflicts of Interest
Aucun déclaré	None to declare
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Sometimes, perhaps too often, a "bad idea this way comes" and one of the latest is not just "bad" but rather horrifying to me — and perhaps to others, too. This is the idea of applying CRISpR technology

to alter viral genes associated with HPV infections. And to test out this idea in healthy women in a clinical trial for which the ability to give any semblance of "informed choice" is far from certain.

Boom in human gene editing as 20 CRISPR trials gear up: A pioneering CRISPR trial in China will be the first to try editing the genomes of cells inside the body, in an effort to eliminate cancer-causing HPV virus (New Scientist, May 30 2017)

Just like toddlers who are enthralled by the latest shiny toy they are given, the researchers in China seem overjoyed by the application of their new toy to cut and edit genes linked to whatever, whenever. How else to explain their desire to refashion genes in HPV viruses found in healthy women when ALL the consequences of this gene "fixing" are unknown — and those that are known are increasingly problematic insofar as ongoing debate suggests that the CRISpR approach may alter not only the targeted DNA but also other base pairs in the genome.

So even if recent news about what gets to be called "collateral damage" (i.e., harm that "just happens") when genes other than those targeted are unexpectedly edited is shown to depend on specific technical details that can be adjusted (e.g., the length of time cells are exposed to the CRISpR surgery), we are far from knowing what "details" will matter. And researchers are perhaps already using their newest sledgehammer not so much to kill a fly as to knockout what is most probably a fly about to take off on its own: in most women, perhaps 99% of HPV infections clear ON THEIR OWN without any intervention. High tech tools become high tech toys too quickly, and these toys become too easily overused.

So the question remains: why use this technique, perhaps why use ANY technique, when HPV viruses are found through routine screening of healthy women? As in other situations: "if it ain't broken, why fix it?" Or if there is concern that there could be some future "break" maybe consider how to avoid this?

If there is serious interest in protecting and promoting women's health, and if persisting HPV infections are of any concern, then would it not be far better to invest in ways to ensure that women have the resources to keep their immune systems strong and healthy? And there are known ways to do this: eliminate poverty, provide toxic-free environments at home and at work for all, guarantee free Pap testing at proper intervals, and support all policies to let women do what they do very well by themselves.

These could be GOOD ideas to come....And the "collateral" effects could be positive, substantial and widespread.

Partager:









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ISSN 1923-2799



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