

Effects of pesticides on male reproductive functions

Abstract

Exposure to pesticides could be one of the contributing cause to the falling sperm counts and rising levels of male infertility. Adverse effects of pesticides in the environment first received widespread attention in the 1960s. However, only recently it has been postulated that long term, low exposure of these chemicals are increasingly linked to human health effects such as immuno-suppression, endocrine disruption, reproductive abnormalities and cancer. This article critically reviewed the epidemiological studies of reproductive toxicity of different pesticides in males. According to previous studies it is shown that exposure to pesticides was significantly associated with sperm levels well below the limit for male fertility. No largescale studies assessing pesticide exposure and its relationship to infertility have been done. To overcome the difficulties in interpretation and to reach strong conclusions, future studies on human male reproductive effects of different types of pesticides should consider several methodological problems. So, we conclude integrated studies considering many factors are warranted to draw definite conclusion and also in the view of adverse health effects observed to some extent in workers with few pesticides, it is necessary now to find out ecologically sound alternatives to pesticides and also to educate the workers/farmers about the safe use of these pesticides to reduce reproductive health risk associated with exposure.