Line 25-26- Trilobites and other arthropods were especially vulnerable just after molting and before they completely renewed their calcified cuticle. Perhaps you could mention this?

Line 39- How can we be sure that these injuries are due to attacks and not to impacts against a hard material? In contrast with the cephalon and pygidium that are thick and have a rounded shape, the thorax consists of potentially far more fragile elements. Please add a few sentences somewhere in the MS.

Line 70- exuvia (singular). What do you mean here? The trilobite was attacked, survived the attack by cicatrazing the wound, molted its old (injured) cuticle and made a new one with fully regenerated thoracic elements? To me regeneration occurs after the animal molts and can be more or less successful. Please make this chronology clearer for the reader. Please, use examples from extant crustaceans (add relevant refs). Exuviae are lighter than whole animals and can be easily transported by currents which increases their likelihood of being broken.

Line 24- You mean "when compared?". Why do you think trilobites had a more durable dorsal exoskeleton. It is not clear. What about other arthropods (e.g. Fuxianhuia, Sidneyia)

Line 26- and also non-biological physical damages

Description – The figured trilobite clearly shows anomalies on both sides of the thorax. The tips of the thoracic elements (right side) seem to have cicatrized. I can hardly see traces of regeneration. Please give details here. Again check in the litterature when and how cicatrization occurs in extant crustaceans. Concerning the left side ts 2 and 3 are probably simply displaced.

Line 84- pleural

Line 89- again, please provide supporting evidence from extant crustaceans

Line 96-97- Why would it be different? (regeneration on right side; cicatrization only left side). It sounds a bit odd. Please explain. I am certain that trilobites were able to heal wounds (e.g. by clotting hemolymph) but less sure that regeneration occurred during the intermolt stage. This has to checked by looking modern crustaceans.

Line 100- This sentence is unclear. I don't understand.

Line 110. Your idea of multiple attacks is interesting. In the present case, both attacks during a very short time (shorter than the whole animal's life) between two molting events. It is possible that the predator made a first attempt then a second one immediately after while struggling with its prey. To me this would be the most plausible interpretation.

Line 112- It is true with lions but I don't think marine invertebrates can spot a "weaker" or "vulnerable" individuals among populations. More likely they successfully attack isolated or slow-moving specimens they meet by chance.

Line 117- What do you mean by « maximizing net energy gain » ? Please explain in more details.

Line 118- Finally, the rarity of trilobite specimens with multiple distinct injuries likely reflects an increased rate of successful predation, and a higher rate of mortality in previously injured individuals.

It is true that trilobites with injuries are rare. These survived non-lethal attacks from predators or other non-biological physical impacts. It does not imply that many trilobites died from successful attacks (no fossil evidence). To me, large trilobites were rarely attacked and/or could easily escape from predators because of their muscle power. In contrast, juveniles were more easily preyed upon. The diet of Sidneyia consists of larval trilobites (see Zacai, Vannier et al.), especially one particular species. The adults of this species are abundant in the Burgess Shale. No injuries due to possible attacks have been reported in these adult specimens. Please, improve your conclusions.

What would be the potential predator of your trilobite

Jean VANNIER