

Propositions

Liver cancer and its tumor microenvironment: the role of mesenchymal stromal cells and SMADs

By Pratika Yuhyi Hernanda



1. Liver tumors are enriched with MSCs, which in turn provide trophic support for tumor growth. Thus a moratorium on of using MSCs to treat liver cancer or even premalignant liver diseases is called for. **(This thesis)**
2. High frequencies of MSCs found in liver tumors with extensive inflammation in response to injury/infection suggest that MSCs are constantly being recruited to the liver in all stages from initial chronic viral hepatitis to full-blown liver cancer. **(This thesis)**
3. The infiltration and enrichment of MSCs in human CRC metastasis to the liver and the subsequent support of tumor cell growth explain why MSCs stimulate CRC liver metastasis. **(This thesis)**
4. A significant increase of SMAD4 was seen in HCC tumor compared to the adjacent tissues and was associated with hepatitis history. **(This thesis)**
5. MPA represents a promising option of immunosuppressive therapy for HCC patients after liver transplantation especially to reduce the risks for HCC recurrence. **(This thesis)**
6. Mischief (corruption) has appeared on earth and at sea because of what the hands of men have wrought; in order that He may make them taste the consequences of their actions; so that they might return to the right path **(Quran surah Ar Ruum verse 41)**. In other words, tumor cells is one of the consequences of what we have done to our body, so that we might return to the healthy life style.
7. The good deed and the evil deed are not alike. Repel the evil deed with one which is better, then you will see between whom and thee was enmity will become as though he was a bosom friend. **(Quran surah Fussilat verse 34)**. In other words, the tumor promoting role of MSCs can be repelled by empowering the tumor suppressive role in MSCs.
8. A person is likely to follow the faith of his friend. **(Hadith At-Tirmidi)**. In other words, people are likely influenced by their environment. And in other words, the tumor growth are likely influenced by its tumor microenvironment.
9. There cometh forth from their (bees) bodies a drink divers of hues, wherein is healing for mankind. Verily in this is a Sign for those who give thought. **(Quran surah An Nahl verse 69)**. In other words, we shall seek the power of bees to heal many kind of diseases.
10. If you do good, you do good for your own selves, and if you do evil, you do it for your own selves. **(Quran surah Al-Isra verse 8)**.
11. Do good as God has good to you and do not commit mischief in the land. **(Quran surah Al Qashas verse 77)**.

