# Chinese Medicine for Side Effects from Chemotherapy for Colorectal Cancer

### 大腸癌化療副作用的中醫藥治療



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### Background 背景

Colorectal cancer:

0

Top three most commonly diagnosed cancer, with over 1.2 million new cancer cases and 6 million deaths in worldwide.

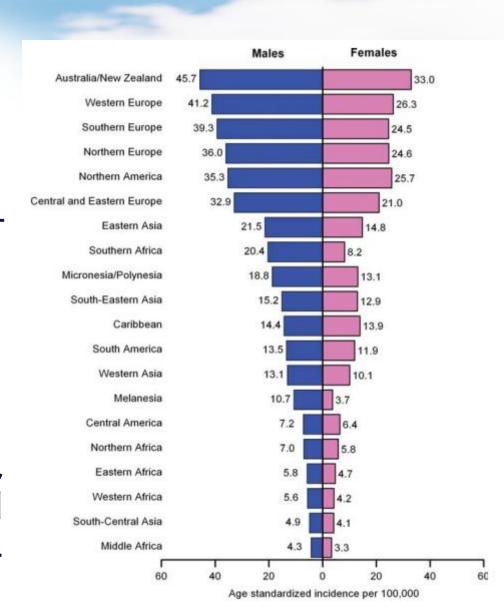
❖ 大腸癌是三大最常見的癌症之一,全球每年有超過120萬個新的新症病例,600萬個死亡病例

Male Female Lung & bronchus Breast 1,095,200 1,383,500 Colon & rectum Prostate 903,500 570,100 Colon & rectum Cervix Uteri 663,600 529,800 Stomach Lung & bronchus 513,600 640,600 Liver Stomach 522,400 349,000 Esophagus Corpus uteri 326,600 287,100 Urinary bladder Liver 297,300 225,900 Non-Hodgkin lymphoma Ovary 199,600 225,500 Leukemia Thyroid 195,900 163,000 Oral Cavity Non-Hodgkin lymphoma 170,900 156,300 All sites but skin All sites but skin 6,629,100 6,038,400

**Estimated New Cases** 

#### Incidence rates 發病率

- Males > Females
- Highest: Australia, New Zealand, Europe, and North America
- Lowest: Africa and South-Central Asia
- Rapidly increasing in Spain, Eastern Asia and Eastern Europe (e.g. Czech Republic and Japan)
- ❖ 患者以男性為主;多發地區包 括澳州,新西蘭,歐洲,北美洲 ,而較少出現於非洲和中南亞



### Aims of chemotherapy 化療目的

- (1) For postoperative adjuvant chemotherapy
- → Reduction of recurrence / death
- (2) For systematic & palliative chemotherapy
- → Prolong survival, decrease tumour-related symptoms, improve general well-being
- (1) 術後輔助化療→減少復發/死亡;
- (2) 系統性和姑息化療→延長生存期,降低腫瘤相關症狀,改善身體基本情況

#### Common side effects 常見副作用

- However, toxicity makes all rapidly proliferating tissue at risk.
- Common side effects: nausea and vomiting, sore mouth, diarrhea, hepatotoxicity, myelosuppression, immunosuppression and etc.
- ❖ 但化療的毒性亦會損害所有迅速生長的正常組織。
- ❖ 常見的副作用包括噁心,嘔吐,口腔疼痛,腹瀉,肝毒性,骨髓抑制,免疫抑制等。

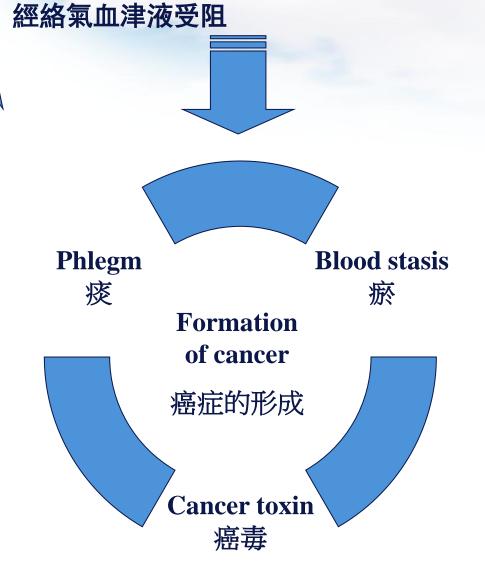
## TCM for colorectal cancer 中醫治療大腸癌

- \* Terminology of colorectal cancer in TCM
  - -Lower abdominal mass (腸覃);
  - -Aggregation accumulation (癥積);
  - -Toxin of intestine (腸毒);
  - -Diarrhea with stool containing mucus & blood (下痢)

#### Cause & mechanism of disease 病因病機

Accumulation of cancer toxin 癌毒內蘊 **Deficiency of** Health Qi 正氣虧虛

Obstruction of meridians and collaterals, Qi, blood, fluid and humor



Chemotherapy 化療

Counteract one toxin with another 以毒攻毒

Cancer 癌症 Chemotherapy 化療

> Further depletion 進一步耗損

Qi, blood, fluid & humor 氣血津液

# Treatment for chemotherapy side effects 化療副作用的治療方案

- Pre-chemo:
  - Preventive treatment of disease/symptoms, nourishing the healthy Qi for pathogen defense
- During chemo:
  Preventing the progress of disease/symptoms
- Post-chemo:
  - Preventing transmission and progress of disease/symptoms by early treatment

健康养生工程

- ❖ 化療前期,未病先防,養正禦邪
- ❖ 化療期間,見微知著,防微杜漸
- \* 化療後期,已病早治,防其傳變

## Current study on TCM 中醫藥的作用研究

- TCM treatments show benefits on
  - induction of cancer cells apoptosis,
  - prevention of metastasis,
  - direct palliation of symptoms,
  - boosting the immune system,
  - increasing patients' appetite,
  - facilitating general recovery
- ❖ 近代研究發現,中醫藥具有誘導癌細胞凋亡、 預防轉移、直接緩解症狀、增強免疫系統能力、 增加病人的食慾和促進全面康復的作用

- → Reducing toxicity
  & enhancing efficacy !!!
  減毒増效!!!
- → Therefore, many cancer patients use Chinese medicine and other alternative and complementary treatment.

很多癌症病人都會服用中藥和使用其他替代治療。

## Common CM treatment 常用中醫藥治療

- Chinese herbal medicine (internal & external use)
- Acupuncture & moxibustion
- Tuina (Massage)
- Exercise (Qigong, Taichi)
- Special diet
- 常用的中醫藥治療包中草藥(內服/外用),針灸,推拿, 氣功,太極,食療等。

But...

How these treatments work?

但...

這些治療的療效和安全性又是如何呢?

What is my weakness? (我的弱點在那裏?)

Barrel theory 木桶原理



### For TCM... 針對中醫藥...

Consolidated Standards for Reporting Trials of Traditional Chinese Medicine (CONSORT for TCM) (For Solicitation of Comments) 中医药临床随机对照试验报告规范(征求意见稿)

WU Tai-xiang<sup>1</sup>, LI You-ping<sup>1\*</sup>, BIAN Zhao-xiang<sup>2</sup>, LI Ting-qian<sup>1</sup>, LI Jing<sup>1</sup>, Simon Dagenais<sup>3</sup>, David Moher<sup>3\*</sup>, for CONSORT for TCM working group

中国循证医学杂志, 2007, 7(9): 625-630.

#### 中医药临床随机对照试验报告规范(征求意见稿) Consolidated Standards for Reporting Trials of Traditional Chinese

**Medicine (CONSORT for TCM)** 

吴泰相<sup>1</sup> 李幼平<sup>1\*</sup> 卞兆祥<sup>2</sup> 李廷谦<sup>1</sup> 李 静<sup>1</sup> Simon Dagenais<sup>3</sup> David Moher<sup>3\*</sup>, 代表CONSORT for TCM工作组

中国循证医学杂志, 2007, 7(8): 601-605.

### IBS的临床研究设计与SPIRIT

- SPIRIT (Standard Protocol Items: Recommendations for Interventional Trials) 2013规范了临床研究方案必须报告的条目及其具体的要求。
- · SPIRIT 强调在临床研究实行前提高研究方案的透明度和完整性,促进高质量临床研究。
- IBS的临床设计上对于主要、次要和其他结局指标,整合数据的方式(如中位数、比例)及每个结局指标的时间点,需要详细说明,并解释所选有效或危害结局指标与临床的相关性。

Chan AW, Tetzlaff JM, Altman DG, et al. SPIRIT 2013 Statement: Defining Standard Protocol Items for Clinical Trials. *Annals of Internal Medicine*, 2013, 158: 200-207.

### 現時項目。。。

- Herb-drug interaction about herbs with Chemotherapy for CRC
- Preclinical study: Prevention of chemotherapyinduced side effect with Chinese medicine

