

Research of Dietary Supplement for Bone & Joint Diseases

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Case of Supplement Therapy

Male, 48 years old, femoral head necrosis due to alcohol abuse.



Before therapy

The X-ray image showed that the femoral head collapsed, surface of the femoral head was rough, several cystic degenerations and dead bones could be seen, and the osseous density was asymmetrical awfully.



After therapy

The X-ray image showed that the femoral head bulged, the osseous density was better than before, new trabeculae grew, and cystic degenerations became small.

Case of Supplement Therapy

Farmer, 34 years old, fixation with nails for the fracture of acetabulum. No-concrescence of the fracture with complication of femoral head necrosis later.



Before therapy

Color image after being enhanced showed that width of fracture was 5mm, contour of femoral head was not clear, and osseous density was not even before therapy on August 18th, 1997.

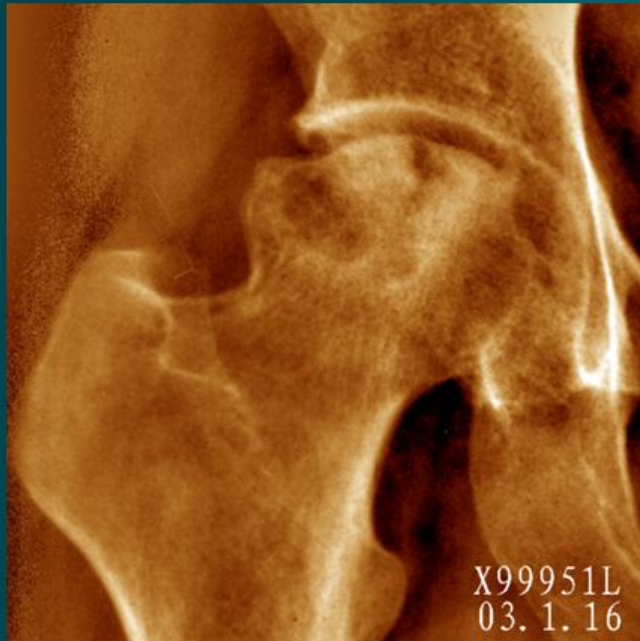


After therapy

Color image showed that the fracture healed, contour of femoral head was clear, osseous density was even, and the necrosis of femoral head was repaired after therapy on August 26th, 1998.

Case of Supplement Therapy

Female, 37 years old, necrosis of total femoral head due to SLE.



Before therapy



After therapy



Case of Supplement Therapy

Female, 43 years old, ankylosing spondylitis with the complication of femoral heads necrosis.



Before therapy

The image before therapy showed that necrosis of left femoral head, and the interspace of the joint became very narrow. The function of the joint was limited.



After therapy

The image after 2 courses of treatment showed that the interspace of the joint appeared, margin of the femoral head was clear, and the osseous structure was rebuilt.

Case of Supplement Therapy

Male, 6 years old, femur head necrosis due to unknown reason.



Before treatment



After treatment



What and Why

Oral administration of a combination of 22 herbs

Plus:

- External treatments with herbs on selected acu-points of TCM
- Justified physical energy stimulations along the channels and acu-points of TCM
- Physician directed exercises for recovery of the joint function

Promoting blood circulation & Nourishing kidney

Targets:

- Circulatory system
 - Immune system
 - Regeneration
 - Metabolism
- *Organs / tissues / cells / molecules

Human and Nature



Basic Genomic Molecules:
30,000 – 40,000



Food



Supplement



Drug



Toxin



TCM Theory and Shortcut

**TCM theory shows the macro view
of the correlations between**

Herbal formula from nature ↔ Symptoms / syndrome in human

Classified natural supplements ↔ Functional physical systems

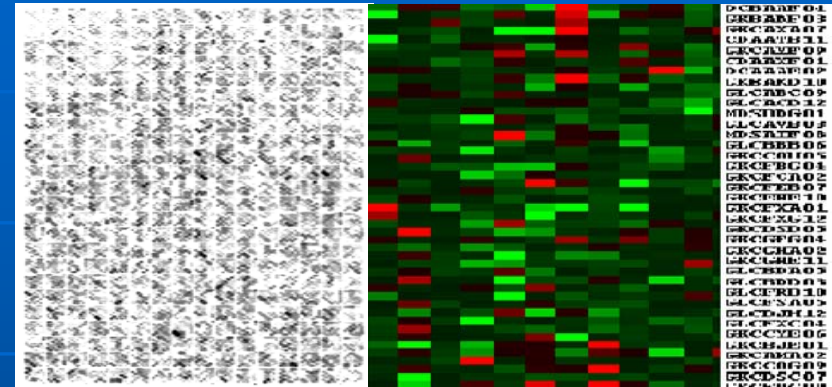
Effective components /
compounds ↔ Biological targets

Shortcut for new drug development

Chain: TCM formula of supplements → leading compounds
→ new drugs for certain health problems

Era and Technology

- High throughput and multi-targets technologies
- Computer / internet / bioinformatics
- Common interface and language
- Network-based micro-views for the correlations between human and natural supplements at the material and molecular level



Development of Medicine

Information Era	Molecular Medicine Integrative Medicine
Industrial Era	Modern Medicine Experimental Medicine
Agricultural Era	Traditional Medicine Experienced Medicine

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