

Elite Training Seminar HKSI

7 October 2009



Changing Role of a Team Physician 1988 - 2009

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Voting Member, Am. Orthopaedic Society For Sports Medicine

Member, Am. Orthopaedic Foot and Ankle Society

Fellow American Academy of Orthopaedic Surgeons

Prior to 1988

Post 1988

Initial Role

- Physician Coverage
- On the Field Care
- Pre-participation Check Up

Physician Coverage

- Only for multisport events
 - Olympics, Asian Games, Commonwealth Games, East Asian Games, Asian Indoor Games, Asian Winter Games, Asian Beach Games
- Occasional single events
 - FINA Indoor Competition
 - Rugby

On The Field Care

- Usual primary care and emergency treatment
 - First aid, suturing, dressing
 - Cramps, sprains
 - Concussion
- Return to play
- Referral plan
- Ambulance arrangement
- Medical kit

Pre-participation Check Up

- For

- 6 Olympics
- 5 Asian Games
- 5 East Asian Games
- 3 Asian Indoor Games
- Pacific Ocean Games
- Commonwealth Games
- Asia Beach Games
- Martial Art Games

- Over 3,000 athletes

Pre-participation Check Up

Questionnaires

Name: _____ Date: _____	
Sport: _____	
1. History of Injury:	
Ligament Sprain: _____	
Musculo-Tendonous Strain: _____	
Patello-Femoral Complaint: _____	
Fracture: _____	
Dislocation: _____	
Concussion: _____	
Other: _____	
2. History of Surgery:	

3. Structural Exam:	
Body Type: Ecto _____	
Genu Valgum: _____	
Squinting Patella: _____	
Hypermobility Patella: _____	
Foot Pronation: _____	
Muscle Mass Deficit: _____	
Other: _____	
4. Flexibility Exam:	
+ - Palms to Floor	+ -
+ - Knee Hyper Ext.	+ -
+ - L. E. Turn Out	+ -
+ - Lotus	+ -
5. Muscle Testing:	
A. Hand: R / L	
Grip: _____	Tip Pinch: _____
	Side Pinch: _____
B. Cybex: (See Tracing attached)	
Cleared: _____	Not Cleared: _____
7. Comments:	

8. Examiner:	

PREPARTICIPATION ATHLETIC EXAM																					
_____ New	Sport: _____																				
_____ Continuing																					
Name: _____ (Chinese) _____	Date of Birth: _____																				
(Last) (First) (Middle)																					
Address: _____	Tel. No.: _____																				
Exam Date: _____	Skin Fold Thickness: _____																				
Chest X-ray Needed: Yes _____ No _____	Date Taken: _____																				
(Within Calendar Year)																					
Lab Results: Hgb. OK _____ Urine OK _____ Recheck _____																					
Vision without glasses: R _____ L _____	(Please specify)																				
Vision with glasses: R _____ L _____																					
Height: _____ Weight: _____	Pulse: _____ BP: _____																				
Stationary Bicycle: 1 min PR: _____ p	3 mins rest: _____																				
	minimum 100 p maximum 100																				
Dip Tet Dates: _____																					
<table border="1"> <tr> <th colspan="2">Physical Exam</th> </tr> <tr> <td>EYE</td> <td>ENT</td> </tr> <tr> <td>Heart: _____</td> <td>Skin: _____</td> </tr> <tr> <td>Abdomen: _____</td> <td>Lungs: _____</td> </tr> <tr> <td>Hernia: _____</td> <td>Spine & Extremities: _____</td> </tr> <tr> <td>Breasts: _____</td> <td></td> </tr> <tr> <td>Head: _____</td> <td>Other: _____</td> </tr> <tr> <td>OK for Unrestricted Activity: Yes _____ No _____</td> <td></td> </tr> <tr> <td>Reason if No: _____</td> <td></td> </tr> <tr> <td colspan="2"> Note: Contraindications to Contact Sports Absent Organs (i.e. eye, kidney, testicle) Blood Dyscrasias Cardiac Disease Unrepaired Hernia Myopia - 20/200 in one or both eyes (uncorrected) </td> </tr> </table>		Physical Exam		EYE	ENT	Heart: _____	Skin: _____	Abdomen: _____	Lungs: _____	Hernia: _____	Spine & Extremities: _____	Breasts: _____		Head: _____	Other: _____	OK for Unrestricted Activity: Yes _____ No _____		Reason if No: _____		Note: Contraindications to Contact Sports Absent Organs (i.e. eye, kidney, testicle) Blood Dyscrasias Cardiac Disease Unrepaired Hernia Myopia - 20/200 in one or both eyes (uncorrected)	
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Post P. E. Screening: Health History Review: _____ Pulse Rate within normal limits after exercise: _____ Check P.E. Form for Completion: _____ DR. _____ (Signature)																					
Rechecks: Reason: _____ _____ _____ Comments: _____ _____ _____ Clearance denied (date): _____ DR. _____ (Signature)																					
Cleared (date): _____ DR. _____ (Signature)																					

Pre-participation Check Up

- 4-part Check Up
 - General
 - Cardiopulmonary
 - Musculoskeletal
 - Special Organs

Despite its apparent simplicity:

- Actually quite effective
- Interesting statistics
 - Smokers
 - Hepatitis B carrier
 - Heart murmur - ? Floppy Valve
 - Joint instability – shoulder, knee, elbow, ankle
 - Muscle tightness
 - Organ enlargement – liver, thyroid
 - Eye ground abnormality
 - On supplements



HONG KONG SPORTS INSTITUTE LIMITED
香港體育學院有限公司

13th June, 2008

To whom it may concern

Dear Sir / Madam,

This is to certify the following athletes are enjoying good health and are fit to take part in the coming Olympic Games in Beijing 2008.

Thank you very much for your kind attention.

Yours faithfully,

Dr. Wong Ping San John
Medical Consultant
Hong Kong Sports Institute Limited

Dr. John P S Wong
MBBS (HKU) M Phil (CUHK)
Medical Consultant
Hong Kong Sports Institute

Current Role

Risk Assessment

rather than

Determination of Fitness to Participate

- Hong Kong Olympic Academy Certificate Course
- Public Media
- Technique – Rules – Equipment Review
- Sports Specific
- Special Situations - exercise on:
 - heat
 - cold
 - water
 - high altitude, etc.

Sport

Three-month bans for four after doping confessions

Four of five Jamaican athletes hauled before a doping tribunal have been banned for three months.

An appeals tribunal barred Marvin Anderson, Lansford Spence, Yohan Blake and Alodin Fothergill after they admitted using methylxanthine, overturning a decision by the anti-doping disciplinary committee, which last month found the athletes not guilty.

Female sprinter Sherry-Ann Brooks had previously been cleared, following a breach in testing her urine samples.



Anderson



Spence

All five had been named to represent Jamaica at the world championships in Berlin last month but officials did not let them participate while the case was ongoing.

Triple Olympic and world sprint champion Usain Bolt plans to try the long jump, but is in no hurry to do so.

"I did say that I wanted to do the long jump but that will not be any time soon," Bolt said in Kingston.

"I want to try the long jump before I retire, maybe five years from now."

The 23-year-old remains undecided about competing at next year's world indoor championship and Commonwealth Games.

"I have never competed at an indoor meet before and I have never competed at the Commonwealth Games, so I will see what my coach has in store for me and then decide," Bolt said.

REUTERS

DOPING

SUNDAY MORNING POST SUNDAY, JULY 26, 2009

Champ fears for sport after compatriots caught

My efforts undone by positive tests: Bolt

- Fair Play –

- Conceptual or

- Realistic

- Aidôs

- Inadvertent Doping

- Intentional Doping

What about other forms of cheating?



Water, water everywhere. Swimmers refresh themselves during the men's 25-kilometre open water race yesterday at the World Swimming Championships in Ostia, near Rome. Italy's Valerio

Cleri easily clinched the crown to more than make up for missing a medal in the 10km race. He won in five hours, 26 minutes to roar of delight from the home crowd. Photo: AP

Should swimsuit world marks carry asterisk?

No steroid scandal

So how dirty are the others?



American implicated in the THG affair. Photo: AP

Jim Litke in New York

Everybody assumes America's best track and field athletes are on the juice. If it's true, imagine how dirty the pros in other sports must be.

Sprinter Jon Drummond, who ran a leg for the US gold medal-winning relay team in Sydney two years ago, sent an e-mail on Tuesday that hints at how much bigger a splash this "designer steroid" story could still make.

He notes that US track and field athletes can be tested anytime, anywhere and have been, about 1,700 times by the end of this year. They are tested more often for more substances than any other individual or team sport athletes in the world. On top of which, their samples are analysed in state-of-the-art labs by the best scientists money can buy.

Drummond doesn't mention, though it's certainly worth noting, that even the richest among them doesn't make one-quarter of what a big-league slugger or big-time running back makes. So not only is there presumably less incentive to cheat; they have less to spend on chemists, trainers and even lawyers.

And there is no arguing with his conclusion: "However, this is a great day for track and field because the cheaters are being caught and that is exactly what's supposed to happen," he says. "I hope the good that comes from this, besides cleaning up our sport even more, will be other professional sports will begin taking anti-doping as seriously as track and field."

AND US TEAM AT ATHENS'

they were not going to be found out. So, cheating in the rawest form." He said if what officials were hearing "is true, then it will produce some names who have tested positive high up in the area of track and field, not only in the United States but, potentially, internationally."

"We are told from people close to the source . . . that these names are big," said Howman.

Asked what it could mean for the Athens Olympics in 2004, Howman said athletes shown to have been taking the steroid would be disqualified from competing and this could affect "a number of very high class, elite athletes, particularly from the United States . . . which could mean a very depleted United States athletics team". Associated Press

By now, everybody has heard some of the names and numbers being thrown around as a result of the federal grand jury probe into a nutritional supplement firm suspected of concocting the "designer steroid" — tetrahydrogestirone — called THG — that until recently was undetectable.

Victor Conte, the owner of that firm, Bay Area Laboratory Co-Operative, or Balco, has said (also in an e-mail) he was told by athletes that 40 Olympic and professional athletes have been subpoenaed. Baseball stars Jason Giambi and Barry

Bonds have received them, while maintaining their innocence, as have sprint stars Marion Jones, Kelli White and shot putter Kevin Toph.

And Terry Madden, who heads the US Anti-Doping Agency that took over testing of track and field athletes in 2000, did nothing to dampen speculation about who else the grand jury might summon when he said last week: "I know of no other drug bust that is larger than this involving the number of athletes involved." Especially because Madden refused to reveal the names, genders, sports or even the number of athletes that had tested positive. But it gets worse.

Don Catlin, a molecular pharmacologist who led the eight-man team at UCLA's Olympic Analytical Laboratory that identified THG, told the *New York Times*: "Athletes may have been using it for months or even years. Are there more drugs like it out there? My instincts tell me yes. We really don't know how many athletes are using designer steroids, but things will become clear in the coming months."

So assume, for the moment, anyway, that some of them are Olympians. Craig Masback, who runs USA Track & Field does. So does US Olympic Committee president Bill Martin.

"Most of our people wouldn't cheat and testing deters others, but let's not kid ourselves. Everybody in our society, in almost every endeavour, is looking for an edge. There will always be a few out there trying to beat the system," Masback said.

Added Martin: "I don't see how we can't be concerned, and not just at this moment. My feeling is that some number of them will always be a half-step ahead of us. But it doesn't mean we will quit trying to catch up."

But here's what's truly unsettling about the whole mess: If their sport is anywhere near as dirty as some of the evidence suggests, considering how much more is at stake in baseball, football, basketball and all the rest all around the world, you don't want to know even half of what's really going on. Associated Press

Nutraceuticals

Sports Pharmacology

Athlete A

- Hyperthyroidism placed on Neomercazole and Atenolol
- Effect on HR, BP – reduced cardiac output
- ↑ Lactate concentration
- ↓ VO₂ Max
- Energy Substrates – ↓ adipose tissue lipolysis
- ↓ Endogenous hormones

■ Rehabilitation

- Physician
- PTs
- ATCs
- Strength and conditioning specialist

■ Transition from Medical care to Performance Care

- i.e. injury resolution to performance resumption

Research

- Injury statistic gathering each game
- Since 1988
- IOC doing it in 2008 Beijing Game
- Current interest
 - ACL tear in female athletes
 - Achilles tendon rupture
 - Muscle strain recovery

Injury Prevention



Beijing Olympics Injury Prevention Study

奥运会每日伤损报告

国家 _____ 大夫姓名 _____ 日期 _____

联系方式(电话/传真/电子邮件) _____

请报告: 在奥运会期间的比赛和训练中, 运动员遭受的全部伤损(创伤和劳损), 无论运动员因此还能继续参加竞赛或训练与否所提交资料乃供医学研究之用, 并将予以保密。

例子 定义与 ①-⑦ 项注释请看反面

运动员注册号 123456789		运动项目/赛事 田径赛100米(女子)		轮次/预赛或训练 四分之一决赛/第一轮预赛		伤损日期和时间 8月12日-下午2:35	
伤损部位 左手腕	编码 15	伤损类型 扭伤	编码 9	伤损原因 滑倒和跌倒	编码 21	养伤天数 10	

运动员注册号	运动项目/赛事	轮次/预赛或训练	伤损日期和时间
伤损部位	编码	伤损类型	编码
伤损原因	编码	养伤天数	

本队今日无一伤损

如有必要请用补充表格。
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定义与 1-7 项注释

① 运动项目/赛事

如果是团体比赛项目, 请仅注明运动项目 (比如: 足球、手球、篮球), 其它所有的运动, 请注明运动项目和赛事 (比如: 游泳 - 4x100米女子自由式接力; 预赛 - 110米男子跨栏; 十项全能 - 跳远; 跆拳道 - 58公斤以下; 自行车赛 - 团队追逐赛)

② 轮次/预赛或训练

如竞赛中发生伤损, 请注明竞赛轮次:
团体比赛项目: 场次或敌队。
其它所有的运动项目: 竞赛(首轮, 四分之一决赛, 资格赛, 决赛, 等等)和预赛或小组赛场次(第一场预赛, 第一场半决赛, A组资格赛, 等等)。
如伤损发生于另一场合, 请与以具体说明(比如训练, 热身)。

③ 伤损日期和时间

请具体说明伤损发生的日期和时间。

④ 伤损部位 - 何处有伤

躯干 1 面部(含眼、耳、鼻) 2 头部 3 脖子/颈椎 4 胸椎/上背 5 胸板/肋骨 6 腰椎/下背 7 腹部 8 骨盆/骶骨/臀部	上肢 11 肩部/锁骨 12 上臂 13 肘部 14 前臂 15 手腕 16 手部 17 手指 18 拇指	下肢 21 腿部 22 腹股沟 23 大腿 24 膝盖 25 小腿 26 跟腱 27 脚脖子/踝关节 28 脚/脚指
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⑤ 伤损类型 - 诊断

1 震荡(无论是否失去知觉) 2 骨折(创伤) 3 应力骨折(劳损) 4 韧带损伤 5 脱臼, 半脱臼 6 腱断裂 7 不稳定性造成的韧带破裂	8 非不稳定性造成的韧带破裂 9 拉伤(关节和韧带损伤) 10 半月板或软骨损伤 11 扭伤/肌断裂/撕裂 12 挫伤/血肿/擦伤 13 慢性肌腱炎/肌腱病变 14 粘液囊炎	15 裂伤/撞伤/皮肤损害 16 牙伤/牙齿碎 17 神经损伤/脊髓损伤 18 肌肉痉挛或抽搐 19 其它
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⑥ 伤损原因

1 劳损(缓起) 2 劳损(突发) 3 非接触性创伤 4 前伤复发	11 与其它运动员的接触 12 接触: 移动物体(如球) 13 接触: 停滞物体(如跨栏) 14 违规(严重犯规)	21 比赛场地条件 22 气候条件 23 设备故障 24 其它原因
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⑦ 养伤天数 - 因伤病而不能参加训练或竞赛的估计(天数)

请提供运动员不能参加或完成正常训练计划的估算天数。

0 = 0 天 1 = 1 天 2 = 2 天 7 = 1 周	14 = 两周 21 = 3 周 28 = 4 周	> 30 = 四週以上 > 180 = 六个月或六个月以上
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Challenges & Frustrations

- Communication

- They don't necessarily tell you the truth anymore!
- No After Care
- No Feedback

- Fitness to return, who decides?

- "The Olympic Sports Medicine Team"

- Litigation

Genesee Valley Sports Medicine Council

Is talent, hard training enough to get to the top?

Exodus 17.10 So Joshua fought the Amalekites as Moses had ordered, and Moses, Aaron and Hur went to the top of the hill.

Exodus 17.11 As long as Moses held up his hands, the Israelites were winning, but whenever he lowered his hands, the Amalekites were winning.

Exodus 17.12 When Moses' hands grew tired, they took a stone and put it under him and he sat on it. Aaron and Hur held his hands up – one on one side, one on the other – so that his hands remained steady till sunset.

Exodus 17.13 So Joshua overcame the Amalekite army with the sword.

Thank you!