



NewsLetter 院訊

Traumatic Shoulder Dislocation

Hospital Updates:

- · Let's Talk About Levofloxacin
- New Drugs Available at SPH
- St Paul's Hostpial Antibiogram Microbiology Report





Dr. Lau Yip Kwong, Francis Specialist in Orthopaedics & Traumatology, St. Paul's Hospital

Traumatic Shoulder Dislocation

The shoulder joint is the commonest joint in the body to be dislocated. Its incidence is around 1-2%. ⁽¹⁾ It occurs approximately in 19.7 per 10000 people, with double the risks in young and sportive males.

Shoulder dislocation refers to the dislocation of the glenohumeral joint. It is a ball and socket joint consisting of the glenoid(the socket) of the scapula articulating with the head of the humerus(the ball). It is a multiaxial joint with 3 degrees of freedom. Its superb mobility enables us to place our hand in a big globe of area in front and around us. However its stability as a result is compromised.



Stability of the shoulder joint depends on its bony construct and soft tissues envelopes. Little stability is provided by the glenoid, which is only 2/5

of a sphere. The humeral head sits on it like a golf ball on a 'T' (Pic 1). The fibrocartilage called labrum deepens this socket vertically and transversely by 75% and 56% respectively. Further stability relies on the ligament and capsule, namely the inferior glenohumeral ligament and muscles namely the rotator cuff muscles around the shoulder joint. Dislocation can result in the damage to any of these bony and soft tissue structures leading to recurrent instability.

Shoulder dislocations can be classified by the final position of the humeral head. Over 95% of cases the humeral head dislocates to the front. This occurs when the upper limb is forcefully abducted, externally rotated and extended. The patient will suffer from pain and inability to move his shoulder. The curve contour of the shoulder will be lost. The shoulder looks 'square'. Self reduction is not always possible and not recommended and immediate doctor consultation is needed.

As the shoulder joint dislocates, nerves can be pulled and damaged. There can be numbness over the deltoid muscle in addition to weakness in elevating the upper limb (axillary nerve). More severe injury affects the wrist and fingers as well (brachial plexus). In up to 95% of cases the bone can also be fractured as the two bones contact ⁽²⁾ (Bony Bankart, Hillsach's lesion).

Careful clinical examination and radiological investigation is mandatory before any manipulation is performed. Non displaced or incomplete fracture can be made more severe and displaced if not careful.

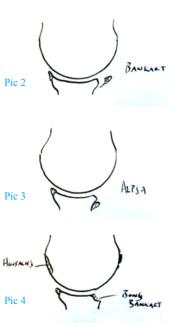
After xray confirmation of intact bones, close reduction should be done immediately. In general it is safer and more comfortable to be done in hospital settings with adequate sedation and analgesics, by an experience orthopedic surgeon.

There are several different maneuvers to reduce a shoulder joint. Simple traction and counter traction under Xray control is adequate in most of the time.

The patient will be discharged with an immobilizer to be worn for 2-3 weeks. Controversies remain regarding neutral position and internal rotation of the humerus. Physiotherapy is started immediately. Regular follow up is required to assess the recovery of shoulder function and the risk of recurrence.

Patients with shoulder instability will demonstrate a positive apprehension and relocation sign. When there is a significant bony defect, the bony apprehension test, in which apprehension is experience even at or below 45 degrees of abduction and 45 degrees of external rotation, is also positive. ⁽³⁾

Further investigations may be needed to look for concomitant injuries in suspected cases; and in cases with persistent instability or recurrent dislocation despite adequate physiotherapy. Pathologies resulting in recurrence include Bankart and Bony Bankart lesion, Hillsach's lesion, ALPSA lesion, PHAGL and reverse PHAGL lesion etc. Temporary protection can be provided with bracing or sports taping. (Pic 2,3,4)



MRI preferably with intra-articular contrast and occasionally CT scan are needed to show the structural damage from the dislocation which require surgical repair. ⁽⁴⁾

Recurrence depends largely on the age at first dislocation. Meta-analysis shows that there is almost a 95% recurrence rate in patients younger than 20 year old. ⁽⁵⁾

%
6
6
6

Recurrence is also found to be higher in athletes with higher physical demand.

Simonet and Cofield:	Athletes	87%
	Nonathletes	30%

Hence it is reasonable for younger patients who are active in sports to have early operative treatment.

Treatment has undergone a few revolutions in the last thirty years: from staples and screws and transglenoid suture in the 80s, the capsular shrinkage in the early 90s, to the presence suture anchors and capsular labral repair.

The gold standard now is Arthroscopic Stabilization performed under general anesthetic, in lateral or beach chair position.

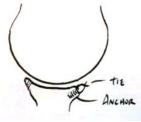
How I do it:

In the lateral decupitus position, diagnostic screening is performed with a 30 degrees lens from the posterior portal. Any concomitant injuries e.g. the rotator cuff and SLAP (superior labral anterior posterior) is looked for. Glenoid dimension is then measured. Any bone loss more than 25% of the diameter will require bony reconstruction e.g. Latarjet operation. ⁽⁶⁾

Humeral bone loss is then looked at. Large defect over the posterolateral tracking part leading to engagement will require additional procedure e.g. arthroscopic replissage. ⁽⁷⁾

Two anterior portals are made under direct vision. The arthroscope is then moved to the anterosuperior transcuff portal. With the posterior and the anteroinferior portals as working portals, the capsulolabral tissue is elevated/ liberated from the glenoid.

⁽⁸⁾ Bony surface of the anterior glenoid is rasped and cartilage on the glenoid is currettaged. 3 or above suture anchors are inserted on-face of the glenoid surface along 3-6



o'clock position. ⁽⁹⁾ The capsulolabral tissue is taken with hooks and tied, to reproduce the bumper effect.

The whole procedure can be finished within 60 minutes.



Reference

- 1. Kirkley A. et al. The development and evaluation of a disease-specific quality of life measuring tool for shoulder instability: The Western Ontario Shoulder Instability Index(WOSI), Am J Sports Med 1998;26:764-772
- 2. Edwards T.B. Radiographic Analysis of Bone defects in Chronic Anterior Shoulder Instability. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol 19, No 7 (September), 2003: pp 732-739
- 3. Brandon D Bushnell et al. The Bony Apprehension Test for Instability of the Shoulder: A prospective Pilot Analysis. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol 24, No 9 (September), 2008: pp 974-982
- 4. Piaseck D. P. Glenoid Bone defect in Recurrent Anterior Shoulder Instability: Diagnosis and Management Journal of the American Academy of Orthopaedic Surgeons
- 5. Brophy R.H. et al. The Treatment of Traumatic Anterior Instability of the Shoulder: Nonoperative and Surgical Treatment. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol25, No 3 (March), 2009: pp 298-304
- 6. Burhkart S.S. Results od modified Latarjet Reconstruction in Patients With Anterioinferior Instability and Significant Bone Loss. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol23, No 10 (October), 2007: pp 1033-1041
- 7. Ozbaydar M. Results of Arthroscopic Capsulolabral Repair: Bankart Lesion Versus Anterior Labroligamentous Periosteal Sleeve Avulsion Lesion. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol 24, No 11 (November), 2008: pp 1277-1283
- 8. Koo S. S. Arthoscopic Double-Pulley Remplissage Techniuqe for Engaging Hill-Sachs Lesions in Anterior Shoulder Instability Repairs. Arthroscopy: The Journal of Arthroscopic and Related Surgery, Vol 25, No 11 (November), 2009: pp 1343-1348
- 9. Boileau P. Risk Factors for Recurrence of Shoulder Instability After Arthroscopic Bankart Repair. The Journal of Bone and Joint Surgery. Vol 88A. No 8 August 20061755-1762

To Boost or Not to Boost?

Wound management often involves consideration for tetanus protection. Tetanus infection is of a major concern in wounds contaminated with dirt, soil, or animal/human feces as they may be home to tetanus spores. Clinicians may wish to probe further to assess if the wound is clean or soiled, the patient's immunity level, and the patient's vaccination history - in particular, the number of toxoid doses received and the interval since the last dose. In adults, a primary immunization series consists of two doses of tetanus toxoid (TT) to be administered 4 to 8 weeks apart, followed by a third dose 6 to 12 months later. After a full series of primary immunization, a booster dose is warranted every 10 years. There is little support for pre- or post-immunization serology to confirm immunization. In between this period, the body is expected

HOSPITAL

to mount an immune response faster than tetanus spores can grow so an additional tetanus toxoid dose is not necessary. An exception to this rule for tetanus prophylaxis is for wounds that are severe or soiled. In this case, if 5 or more years have elapsed since the last booster, a dose should be administered as soon as possible. More frequent boosters are not necessary and can lead to increased adverse events and unnecessary expenses. Also, World Health Organization (WHO) recommends that the combination product of tetanus and diphtheria toxoid (Td) is preferred when an adult requires a tetanus booster dose. The rationale for recommending the combination Td product is that it provides a convenient way to reinforce diphtheria protection.

History of tetanus immunization	Clean, minor wounds		All other wounds		*Yes, if > 10 years since last booster	
History of tetanus infinitunization	TT# / Td	Tlg^	TT / Td	Tlg	+ Yes, if > 5 years since last booster	
Uncertain or < 3 doses of an immunization series	YES	NO	YES	YES	TT= tetanus toxoid Td= tetanus toxoid & diphtheria	
> 3 doses received in an immunization series	NO*	NO	NO ⁺	NO	Tlg= tetanus immunoglobulin	

#= At SPH we currently have the tetanus toxoid vaccine Tetavax®.

Tetanus toxoid and diphtheria combination (Td) vaccines are registered in HK (eg. Imovax DT[®], Boostrix[®], D.T Vax[®], Diftet[®]) but at SPH we currently only have the Tdap + polio combination vaccine (Boostrix < polio>).

^= Tetanus immunoglobulin products are registered in HK (eg. Hypertet® and Tetagam P®) but are not currently stocked at SPH.

Drug and Therapeutics Committee (DTC) - New Drug Requests

In January 2014, DTC approved the following drugs in SPH:

Eliquis (apixaban 2.5mg, 5mg) - Eliquis is a direct, selective factor Xa inhibitor. It is indicated for the prevention of stroke and systemic embolism with non-valvular atrial fibrillation, for patients with one or more risk factors, e.g. prior stroke/TIA, greater than 75 years old, hypertension, diabetes, and heart failure (NYHA Class II or higher). In the clinical trials, Eliquis was shown to be superior to warfarin in primary endpoint (stroke/systemic embolism), primary safety endpoint (major bleeding), and key secondary endpoint (all cause mortality). The usual dose of Eliquis is 5mg twice daily and dose reduction to 2.5mg twice daily is required in patients aged 80 years or above, with body weight less than 60kg, or with severe renal impairment. Unlike warfarin, INR monitoring is not required for Eliquis. However, there is no antidote if excessive Eliquis is administered.

Zostavax vaccine (Zoster vaccine live) - Zostavax vaccine is indicated for the prevention of herpes zoster and herpes zoster-related post herpetic neuralgia and for the reduction of acute and chronic zoster-associated pain. It is recommended for individuals aged 50 years or above. Current

recommendation from the manufacturer is to have one single subcutaneous injection. In clinical trials, protection was demonstrated through 4 years of follow-up, but currently no information on re-vaccination is available.

Telfast (fexofenadine 6mg/ml) paediatric oral solution - Telfast, a non-sedative antihistamine, is now available as a new formulation- oral solution for paediatric use. The licensed indication is similar to the table formulation – relief of symptoms associated with seasonal allergic rhinitis and chronic idiopathic urticaria in adults and children from the age of 2. The following dosage is recommended:

- Allergic rhinitis
 - 2-11 yrs : 30mg twice daily
 - ≥ 12 yrs: 60mg twice daily or 120mg or 180mg once daily
- Urticaria
 - 6-11 yrs: 30mg twice daily
 - \geq 12 yrs: 180mg once daily

Papulex topical preparations - Papulex topical preparations are available in a range of products: soap-free cleansing gel, oil-free cream, and Isocorrexion hydrating cream. They are indicated for acne-prone skin and have the advantage

of no risk of bacterial resistance as they contain the active ingredients: nicotinamide (anti-inflammatory), active ABA (a patented technology which blocks the proliferation of *P. acne*) and zinc (to reduce sebum production).

Reference

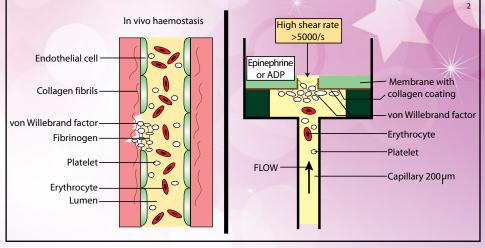
- 1. Canadian Immunization Guide. 7th ed. Ottawa, ONT: Public Health Agency of Canada; 2006.
- 2. Lacy C, Armstrong L, Goldman M, Lance L. Drug Info Handbook with International Trade Names Index. 18th ed. USA: American Pharmacists Association; 2009-2010:1558-1561.
- 3. Tetanus toxoid (adsorbed): Drug information. www.uptodate.com. Accessed Feb 1, 2014.
- 4. Weekly epidemiological record. http://www.who.int/immunization/wer8120tetanus_May06_position_paper.pdf. Accessed Feb 20, 2014.
- 5. Rusty nails, Dirty Wounds and Tetanus. http://ushealthworks.wordpress.com/2010/11/10/rusty-nails-dirty-wounds-and-tetanus/ Published Nov 10, 2010. Accessed Feb 20, 2014.
- 6. Product monographs.

Platelet Function Assay Test

Background

Platelet Function Assay (PFA) Test is a new laboratory screening test of platelet function that measures both platelet adhesion and aggregation (primary hemostasis).

PFA has now mostly replaced bleeding time globally due to better reproducibility and sensitivity in evaluating platelet dysfunction disorders. Bleeding time is very insensitive to aspirin and may miss as much as one third of cases of von Willebrand disease (vWD). The Colleage of American Pathologist and



American Society for Clinical Pathology has officially published their position on this issue in 1998 stating that bleeding time is not a useful predictor of the risk of haemorrhage associated with surgical procedures in the absence of a history of a bleeding disorder.¹

Platelet Function Analyzer

Platelet function analyzer is a system to aid in the detection of platelet dysfunction in which citrated whole blood is aspirated at high shear rates through membrane coated with collagen and epinephrine (Col/EPI) or collagen and ADP (Col/ADP).

These agonists induce platelet adhesion, activation and aggregation leading to rapid occlusion of the aperture and cessation of blood flow termed the closure time (CT). Platelet dysfunction detected by the system may be acquired, inherited, or induced by platelet inhibiting agents.³

Potential clinical applications

- Preoperative evaluation of platelet function
- · Determining the presence of aspirin-induced platelet dysfunction
- · Evaluation of patients with suspected inherited or acquired platelet disorders, such as vWD
- Monitoring desmopressin (DDAVP) treatment in patients with Type I vWD⁴

Reference

- 1. Rodgers RPC, Levin J. A critical reappraisal of the bleeding time. Semin Thromb Hemost, 1990, 16:6-20.
- 2. Homoncik M, Jilma B, Hergovich N, Stohlawetz P, Panzer S, Speiser W. Monitoring of aspirin (ASA) pharmacodynamics with the platelet function analyzer PFA-100. Thromb Haemost. 2000;83:316–321.
- 3. Favaloro EJ. Clinical application of the PFA-100(R). Curr Opin Hematol. 2002;9:407–415.
- 4. Harrison P. Progress in the assessment of platelet function. Br J Haematol. 2000;111:733–744.



2014四旬期退省活動

(12/3/2014)

醫院周年退省已於三月十二日在舂坎角靜修院舉行。今年有四十五 人參與,神師為葉慶華神父,主題是「不斷皈依」。

一如以往,退省中有恭唸玫瑰經、個人靜默及祈禱時刻、修和聖 事、感恩聖祭、拜苦路和神父專題講座。

葉神父指導我們,新約所強調的愛 - 「自我犧牲」是最高尚的愛。 「愛」包含忍耐,我們需要謙遜地、有氣量地接納他人,並給予他 人成長的機會;我們亦需要與天主建立密切的關係,培養先知的修 養。當需要提出意見時,心裡是懷著愛德的。葉神父揀選了一些聖 經章節(創世紀37及39章、羅馬人書8章35節、弟茂德後書4章16 節)幫助我們了解天主對我們的愛,那就是祂時常與我們同在,無 論在困境抑或在絕望中,沒有東西可使我們與天主的愛相隔絕。

感謝天主讓我們聚首一堂在信仰層面上互相加油;感謝葉神父為我 們準備豐富的講道;感謝靜修院給我們預備的美食;更感謝在禮儀 中服務的人員。盼望我們常常反思神父給我們的提問:如何使醫院 散發出天主教的特色?就是在所接觸到的人身上,以及同伴們身 上,看到耶穌,以這顆心去服務他人。

天主保佑!

牧靈部





聖保祿醫院B座平頂儀式

(24/03/2014)

聖保祿醫院B座平頂儀式已於二零一四年三月二十四日上午十一時舉行, 距離B座大樓 的落成又跨了一大步。本院十分榮幸能邀請到香港教區主教湯漢樞機、沙爾德聖保祿 女修會省會長何美蘭修女、香港特別行政區政府食物及 生局局長高永文醫生、執行董 事張柱見修女及醫務總監何兆煒醫生為平頂儀式擔任主禮嘉賓,與超過一百五十位出 席者一同見証這個重要的時刻。承蒙修會、各位來賓及醫院員工的支持及參與,典禮 在一片歡樂氣氛下順利結束。儀式結束後,眾人聚首一堂,一同享用茶點和回顧當日 的花絮。





(23/2/2014)

我們的外展團隊聯同聖保祿中學醫療服務團隊及牛頭 角明愛中心天主教基督勞工堂,於二月二十三日為約 一百位牛頭角的街坊提供免費身體健康檢查。檢查項 目包括血壓、血糖、血脂、骨質密度測試及超聲波腹 腔檢查。活動也設有護士義工為街坊解答健康問題的 環節,為他們帶來健康衛生資訊。



活動於參與人士及各義工團隊的支持下圓滿結束,我們都渡過了愉快充實的一天;義工團隊的服務亦得到街坊的肯定, 借此篇幅感謝義工們的無私奉獻。



『同心展關懷』 (Caring Organization)

聖保祿醫院再度榮獲由香港社會服務聯會頒發的『同心展關懷』(Caring Organization)殊榮,以表揚醫院於過去一年對關懷社區、關懷員工及關 懷環境的承擔及積極實踐企業社會責任。

本著「為一切人,成為一切」(格前9:22)的聖保祿服務精神,我們的團 隊會繼續為病人提供有效的醫療服務,幫助病人恢復健康的身體;藉著 關愛的行動令病者及其家屬獲得心靈的平安。另一方面,透過與地區慈 善團體合作,我們的義工隊每年多次出勤為基層市民提供免費身體檢 查,以傳遞健康資訊及提高市民對自身健康的關注。

義工獎勵 (Recognition for Volunteers)

為推廣及表揚義工服務,社會福利署會按義工每年累積的服務時數而頒 發嘉許狀。聖保祿醫院很榮幸獲得由該署頒發的團體「義務工作嘉許狀 一 金狀」,以表揚本院在2013年積極參與義務工作,累積服務社會時數 超過1,000小時。

此外,我們有9位義工獲頒發個人嘉許銅狀,以表揚他們服務社會達50 小時。他們包括張柱見修女、陳潔明、李業鴻、馬曼芳、伍尚兒、伍淑 慧、邵惠芳、嚴晞如及楊紫馨。

在此,我們衷心祝賀各位獲嘉許人士,並感激所有積極參與和協助本院 舉辦外展服務的義工同事。





Τορις	CHAIRMAN	Speaker			
17/6/2014 (TUE) Sarcopenia & Cognitive Decline	<i>Dr. Tse Kai Chung</i> Specialist in Nephrology St. Paul's Hospital	Dr. Jean-Pierre Michel Honorary Professor of Medicine, the Geneva Medical School and University Hospitals (Switzerland), Limoges University (France) and Beijing University Hospital (China)			
Time:1:00pm -2:00pm (Light Refreshment Provided at 12:30pm)Venue:Conference Room, 2/F, St. Paul's ConventRegistration:Ms Merrillin Leung, Tel: 2830 8857, Fax: 2837 5271 E-mail: sph.sdd@mail.stpaul.org.hkCME/ CPD Accreditation for all colleges (Pending approval). CNE Point: 1 Point					

This publication is primarily intended for the perusal of staff and visiting doctors of St. Paul's Hospital for general information and reference only. All information is not guaranteed or warranted to be absolutely accurate. St. Paul's Hospital's shall not be liable for any losses incurred or damages suffered by any person as a result of the use of the information of this publication, or any actual or alleged infringement of copyright or other intellectual property rights. Reproduction, in whole or in part, is not permitted without the written approval from the Hospital Management. For comment, advice or contribution, please contact Marketing Department at 2830 3742 or e-mail: sph.mkt@stpaul.org.hk