New Clinical Sessions

Minimally Invasive Centre		
Booking & Enquiry: 2608 3383	Time Schedule	
Clinical Psychology Ms Lee Mary	Mon Sat	10:00-18:00 09:00-13:00
General Surgery Dr Raymond Yiu	Mon Thu Fri	10:00-13:00 10:00-13:00 15:00-18:00
General Surgery Dr Fung Ming Kit, Terence	Tue Wed Fri Sat	11:00-13:00 15:00-18:00 11:00-13:00 11:30-16:00

Specialty Clinic - Paediatrics		
Booking & Enquiry: 2608 3366	Time Schedule	
Dr Lau Shing Chi, Steve	Tue Wed Thu	09:30-13:00 15:00-18:00 09:30-13:00
Dr Chu Wai Po, Reann	Mon Wed Fri	09:30-13:00 15:00-18:00 15:00-18:00
Dr Yim Sau Wing	Mon Tue Wed Thu	10:00-13:00 15:00-18:00 10:00-13:00 15:00-18:00
Dr Pang Lap lan	Mon Thur Sat	09:30-13:00 15:00-18:00 09:30-13:00

Regular Meeting

Meeting: X-Ray Meeting

Date :	10 April 2024 (Wednesday)
Time :	8:30 a.m. – 9:30 a.m.
Co-ordinator:	Dr HUI Ping Kuen, John Head, Department of Medical Imaging, Union Hospital
Venue:	Training Room, 8/F MIC, Hospital Building, Union Hospital
Booking &	2608 3160
Enquiry:	(Quality Assurance and Training Department)

For unsubscription to this newsletter, please send your name, contact number and address to: unsubscribe@union.org or fax 2605 4499

Union Hospital Polyclinic (Tsim Sha Tsui) Booking & Enquiry: 2375 3323 Time Schedule **Clinical Psychology** 14:00-18:00 Ms Lee Mary Wed 15:00-18:00 **General Surgery** Thu 15:00-18:00 **Dr Raymond Yiu** Sat 10:00-12:00 Mon 10:30-12:30 Ophthalmology Dr Leung Lai Chun, Bonnie

Programme

The Practice of Telemedicine: Medical-legal and Ethical **Issues**

Thu

10:30-12:30

Date: 19 April 2024 (Friday) Time: 2:00pm-3:00pm

Venue: 8/F MIC, Union Hospital or Zoom

Mr David Kan Speakers:

Partner, Solicitor Advocate, Howse Williams Honorary Associate Professor Department of Pathology,

Faculty of Medicine. The University of Hong Kong

Ms Maureen Liu

Partner. Howse Williams

Chairperson: Dr Yannie O.Y. Soo Assistant Chief Hospital Manager

Union Hospital



On-site Registration Lunch will be served at 1:30pm



2608 3180

cme@union.org

Post-Event Highlights



(From Left) Dr Clara Wu, Emberton, Dr Mak Siu King On 11 March 2024, Union Hospital hosted a CME lecture titled "High-Focused Ultrasound Treatment for Prostate Cancer". We were honored to have Prof. Mark Emberton, a distinguished expert from University College London, deliver an insightful presentation. The engaging discussion that followed sparked a lively exchange of ideas, receiving an overwhelming response from the participants.

UNION connection **VOL 208**



Message from the Chief Hospital Manager

Dear Colleagues,

March 2024

The Chinese New Year came and went. After a family gathering lunch, exchanging greetings and laisees on the first auspicious day of the Year of the Dragon, I went to Zhuhai across the border and stayed for two nights at the Renaissance Hotel there, sampling various cuisines of Greater Bay fame. During that sojourn, we ventured to travel to Macau via Gongbei Kou An on a private van on the third day of Lunar New Year. We found that the border checkpoint officials operated very efficiently and humanely because elderlies of our age do not have to alight from the vehicle to get across, and there were no long queues! The Rua do Cunha was packed shoulder to shoulder with people in joyful and celebratory mood. I managed to find a provision store there and bought a few cans of spicy sardines in extra virgin olive oil for my pantry! Then we tried our luck in one of the casinos in the 'City of Dreams'. Our group of friends did make some money at the roulette table. It was also fun to watch the expressions of the high rollers at baccarat tables — the extremely anxious way they 'squeezed and flipped' their cards and the look of disappointment after losing the bet.

We had afternoon coffee in the lounge of the Morpheus where the decor was ultra-modern avant-garde. It was quite entertaining to watch the passers-by — some elegant and gracefully dressed, while some were like country bumpkins in Dior outfit. The day ended with a sumptuous hotpot dinner with extravagant seafood accompanied by bottles of vintage Château Latour.

After the hustle and bustle of the Lunar New Year celebrations, I returned to the real world, browsing through reports and official documents in my office. Looking out of the long window, I can see the rooftop garden of the New Extension Block taking shape. This garden is the re-make of the previous one on the podium floor or second floor of the hospital main building. Now it is being elevated to the sixth-floor level. Thanks to the splendid work of the landscape and garden designer, the result is a modern multi-modular, and multi-functional greenery, like a colourful enclave nestling under the lush of green hillside with the Amah Rock atop.

It looked so tempting that I decided to take a stroll in the as yet closed to the public 'sky garden' of ours, despite it being a crisply chilly morning. Accompanied by Ms Pun Tsz Kei and a couple of nursing officers, I found it very relaxing and comforting to meander along the paths amid green bushes and blooming rhododendrons. One would be tempted to sit down on one of the benches to meditate, thus forgetting all the troubles and worries. I shall stop here with an invitation to all our readers to visit this new facility of ours when you happen to visit Union Hospital after its opening.

Yours most sincerely,

Dr Anthony KY Lee Chief Hospital Manager & Medical Director

Sharing Corner

Preoperative Non-palpable Breast Lesion Localization



Dr Tsui Hoi Ling, Karen Specialist in Radiology **Union Hospital**

Introduction

The development of screening programmes for breast cancer has led to a decrease in mortality from breast cancer in women. Improved screening techniques have found increasing numbers of nonpalpable breast cancers and highrisk lesions. The smaller lesions and earlier stage render patients eligible for breast-conserving treatment. Precise preoperative localization of nonpalpable breast lesions is essential to achieve accurate diagnosis in suspicious lesions and to obtain adequate excision margins, while avoiding excessive surgical resection.

Conventional Localization

Different techniques for the pre-operative localization of breast lesions have developed over time. The currently widely used wire guided localization (WGL) technique was adopted since the late '70s, where the tip of a flexible wire is anchored to the lesion. However, this procedure has several limitations, including wire dislodging, migration or wire fracture. There is also higher patient discomfort and requires greater compliance from patients, as the wire must remain in position between the time of deployment and surgical excision, and could affect the patients' quality of life. As the wire should be placed immediately before surgery, rising possible logistical difficulties between the surgeon, operating theatre and the radiology schedule that can cause delays in surgical start time. Moreover, poor cosmetic outcomes have been described and high rates of a non-radical excision of the lesion due to wire dislodging and poor localization have been reported.

Radioactive guided localization techniques (RGLT), consisting of a radioactive substance placed into target breast lesion, was introduced in 1996 as an alternative to WGL. More specifically, a 99mTc-radiolabelled albumin-based colloid, named radioisotope-guided occult lesion localization (ROLL) was used. It can be localized during the surgery using a handheld gamma probe, represented the first reliable non-wired alternative, overcoming the aforementioned issues. However, RGLT has its own limitations. It is limited to centres with a nuclear medicine unit and availability of same or next-day surgery. It requires extensive multidisciplinary coordination and regulatory compliance. Other documented constraints include inaccurate injections of isotopes in a compressed breast (especially thin ones) and ductal migration of isotopes.

Non-wired Non-ionizing Devices

New advances in localization techniques for nonpalpable breast lesions have been introduced in recent years, allowing decoupling of localization and operation schedules. These latest technological evolution that has overcome the radioactivity limitation by introducing small radar reflectors (Savi Scout; Cianna Medical, Merit Medical Systems, Inc., South Jordan [UT], United States), magnetic seed markers (Magseed; Endomagnetics, Cambridge, England), and RFID tags (LOCalizer; Hologic, Marlborough, Mass). The device length varies from 5-12mm. These small devices, preloaded into a 12-18 gauge needle introducer, are deployed into the lesion by radiologists any time before surgery and can be implanted long-term. A specific probe, connected to a console that emits audio and visual feedback in proportion to the localizer distance, is used in the operating theatre. These non-wired non-ionizing (NWNI) devices may represent the optimal choice for the preoperative non-palpable breast lesion localization.

There are also limitations regarding use of NWNI devices. Migrations of localization devices have been reported and savage wire localization is needed. Depth of the lesions can also limit their delectability, ranging from 3-6cm. Failures related to radar reflector localization typically are due to a lack of signal from the device. Dense objects between the reflector and handpiece, such as calcified masses, hematomas, or localization wires, can weaken or interfere with signal detection. Radar reflector antennae are made of nitinol, an alloy of nickel and titanium. There is potential for an allergic reaction for patients with known allergies to nitinol. For magnetic seed localization, it cannot be used in patients who have a pacemaker or implanted chest wall device. There are also intraoperative considerations. Non-ferromagnetic surgical tools must be used while the probe is in use, because ferromagnetic instruments will interfere with the signal.

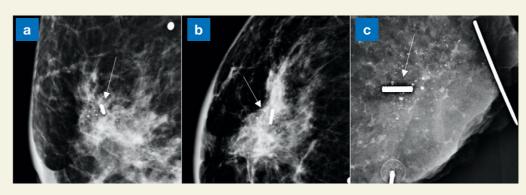
The burden of a re-operation involves a return to the operating room, prolonged recovery and a trauma for patients and family, in addition to an increase in poor cosmetic outcome and additional costs. The risk factors for poor cosmetic are dictated by the shape and size of the tumour, its location, the tumour-breast ratio, postoperative radiation and the total volume removed. The wire entry point is somewhat constrained for radiologists and may dictate the surgery incision path. The ability to choose the incision site closest to the lesion, as in the case of wireless localization minimizes non-target tissue removal. Numerus studies on these NWNI devices showed comparable clear margins rate and re-operation rate with conventional localization methods. There is no significant differences in terms of specimen's volume or weight between NWNI and wire or ROLL techniques. As NWNI devices can be implanted any time before surgery, it is an important aspect from the point of view of the organization and allocation of resources, as well as of patients' quality of life.

These NWNI devices are MRI conditional, although magnetic seed markers and RFID tags cause susceptibility artifact except Savi Scout. It is possible to implant these devices before neoadjuvant chemotherapy, saving need for additional localization prior to surgery.

Localization of axillary lymph nodes have also been reported using NWNI devices. Accurate localization of sentinel lymph nodes is equally important. Sienna dye, a magnetic tracer with superparamagnetic iron oxide compound and particle dimensions of 60 nm can be used for sentinel lymph node localization and biopsy. The Sienna dye can be injected in the operating theatre at least 20 minutes before sentinel lymph node biopsy and is detected with the Sentimag probe. Therefore, in Magseed cases, it is possible to perform sentinel lymph node mapping with the same probe in the same session with the use of Sienna dye during surgery.

Conclusion

There have been a gradual transition of pre-operative localization of non-palapble breast lesions from traditional wire and radioactive guided techniques to the use of non-wired non-ionizing localization devices. They have the potential to reduce the amount of nontarget tissue removed, improve cosmesis, and improve the patient's experience in terms of comfort and scheduling flexibility. Each localization technique has distinct strengths and weaknesses that must be considered.



Patient with invasive carcinoma. presented with fine pleomorphic microcalcifications in the upper outer quadrant of the right breast. Magseed is placed under stereotactic guidance. (a) MLO and (b) CC views of postplacement mammograms, showing Magseed (arrow) at the center of the microcalcifications. (c) specimen mammogram showed excision of microcalcifications and Magseed (arrow) with adequate margin. No significant displacement of Magseed seen.

References

- 1. Kapoor, M. M., Patel, M. M., & Scoggins, M. E. (2019). The wire and beyond: Recent advances in breast imaging preoperative needle localization. RadioGraphics, 39(7), 1886-1906. https://doi.org/10.1148/rg.2019190041
- 2. WAZIR, U., TAYEH, S., PERRY, N., MICHELL, M., MALHOTRA, A., & MOKBEL, K. (2019). Wireless breast localization using radio-frequency identification tags: The first reported European experience in breast cancer. In Vivo, 34(1), 233-238. https://doi.org/10.21873/invivo.11765
- 3. Guirguis, M. S., Adrada, B. E., Scoggins, M. E., Moseley, T. W., Dryden, M. J., Le-Petross, H. C., Rauch, G. M., & Whitman, G. J. (2022). The challenging image-guided preoperative breast localization: A modality-based approach. American Journal of Roentgenology, 218(3), 423-434. https://doi.org/10.2214/ajr.21.26664
- 4. Garzotto, F., Comoretto, R. I., Michieletto, S., Franzoso, G., Lo Mele, M., Gregori, D., Bonavina, M. G., Bozza, F., Caumo, F., & Saibene, T. (2021). Preoperative non-palpable breast lesion localization, innovative techniques and clinical outcomes in Surgical Practice: A systematic review and meta-analysis. The Breast, 58, 93-105. https://doi.org/10.1016/j.breast.2021.04.007
- 5. Woo, S., Wong, T., Chau, C., Fung, W., Chan, R., Yung, A., & Ma, J. (2022). Radar localisation of non-palpable breast lesions in a Chinese population: A pilot study. Hong Kong Journal of Radiology, 25(3), 192-203. https://doi.org/10.12809/hkjr2217371
- 6. Fung, W., Wong, T., Chau, C., Yu, E. L., Chan, T., Chan, R. L., Yung, A. W., & Ma, J. K. (2020). Safety and efficacy of magnetic seed localisation of non-palpable breast lesions: Pilot study in a Chinese population. Hong Kong Medical Journal. https://doi.org/10.12809/
- 7. Tsui, H., Fung, E., Kwok, K., Wong, L., Lo, L., & Mak, W. (2022). Magnetic marker wireless localisation versus radioguided localisation of nonpalpable breast lesions. Hong Kong Journal of Radiology, 24(4), 247-256. https://doi.org/10.12809/hkjr2117267
- 8. Au, A., Wan, A., Leung, B., Lo, S., Wong, W., & Khoo, J. (2017). Efficacy of radioguided occult lesion localisation: How well are we doing? Hong Kong Journal of Radiology, 19(4), 269-278. https://doi.org/10.12809/hkjr1615317

Remarks The author has no conflict of interest to disclose with respect to this article.

Sharing Corner

Parent-Child Interaction Therapy (PCIT)— An Evidence - Based Approach in Supporting Children

Ms Heiki Lo

Mis Heiki Lo
Registered Counseling Psychologist
Union Hospital

Introduction

with ADHD

Attention-Deficit/Hyperactivity Disorder is a common childhood neurodevelopmental disorder, characterized by a persistent pattern of inattention, hyperactivity, impulsivity that interferes daily functioning, academic activities and social relationships.¹ One of the common features of ADHD in children is emotional dysregulation, accompanied with low frustration tolerance and explosive behaviors.² Children diagnosed with ADHD exhibit increased disruptive behaviors such as tantrums, meltdowns, and aggression.³ In addition, parents of children with ADHD experience significantly higher parenting stress due to the above-mentioned behavioral problems that may affect their emotional-well being.⁴

Common treatment for ADHD in children is medication, behavior therapy, parents training or a combination of the above for better management of symptoms. Research also confirmed positive and effective treatment outcomes when medication is combined with parent training, such as reducing symptoms of ADHD in children,⁵ improving quality of parent-child relationship and reducing parenting stress in ADHD families.⁶

Parent-Child Interaction Therapy (PCIT)

Parent-Child Interaction Therapy (PCIT) is an evidence-based intervention that has been shown to be effective in reducing externalizing symptoms in children ages 2 to 7, by increasing quality of interactions between the caregiver and the child. PCIT focuses heavily on parents training and their skills in learning and managing their children's behavior with consistency. PCIT is based on attachment theory and social learning theory, with goals including improving the parent-child relationship, increasing parents' observation and playing skills, developing parents' skills in attending to their children's positive behaviors, and building parents's confidence in managing their children's misbehaviors. PCIT typically can be completed within 12-20 sessions, depending on parents' attendance and homework completion. Parents's active participation is essential in seeing effective progress.

Procedures of PCIT

PCIT consists of two phases. The first phase is referred to the "Child-Directed Interaction" (CDI) while the second phase is called the "Parent-Directed Interaction". In the CDI phase, the parent establishes warmth by learning "PRIDE" skills and following their child's lead through play. Parents are taught how to how to praise (P), reflect (R), imitate (I), describe (D) and enjoy (E) in the play session. Parent wears a "bug-in-the-ear" device which allow the therapist to observe the interaction between the parent and child through a one-way mirror or video live feed. The therapist provides immediate feedback to the parent, teaching parents on ways to play and communicate with the child. Once the parent has mastered the "PRIDE" skills, they can move onto the "Parent-Directed Interaction" phase. The aim of this phase is to equip the parent with positive and essential skills in managing their child's misbehavior with confidence and consistency. Parents learn how to give effective commands, set boundaries and discipline their children in a safe and supportive environment. Treatment continues until the caregiver masters the skills and child's behavior has shown improvement from above clinical cut-off to normal range. Two standardized measures, the Eyberg Child Behavior Inventory (ECBI) and the Dyadic Parent-Child Interaction Coding System (DPICS) are used to monitor progress throughout the course of treatment.

Effectiveness of PCIT on Disruptive Symptoms and Parents

Various supporting research have been conducted to demonstrate the effect of PCIT on both children and parents, specifically on children's behavioral problems and parents' parenting skills and practices. Meta-analysis research indicated that children who received PCIT exhibited a significant reduction of behavioral problems, according to the ECBI scores, which reflect the intensity and frequency of behavioral problems reported by parents.^{10 11} Parents also reported increased use of positive parenting skills and decreased use of negative parenting skills after undergoing PCIT treatment. Parents show increase in reflective listening, physical proximity, prosocial verbalization and decrease in sarcasm and criticism of the children after undergoing PCIT treatment.¹² In one particular study that examines the effect of PCIT on Hong Kong Chinese families, results indicated significant decrease in child behavior problems, parenting stress, negative emotions, negative parenting practices, and increase in positive parenting practices in the intervention group, compared with the control group, demonstrating the effectiveness of this intervention on both children with behavioral problems and their parents.¹³

Conclusion

PCIT is an evidence-based, assessment-driven parent training intervention that is highly effective in helping young children who are exhibiting disruptive and externalizing symptoms and their parents. What sets this intervention apart from other approaches is its several unique features, which include its huge emphasis on the quality of parent-child interaction and its live coach sessions. PCIT is an intensive training program, it is important to note that parents' level of participation, attendance and other environment stressors may affect treatment process and outcome. Due to the intensity, strict attendance and mastery criteria of this particular intervention, dropouts are inevitable. In addition, PCIT may not be an ideal intervention for busy parents and those who are experiencing in high level of stress. More research is needed to explore the effect of PCIT on families when PCIT is conducted by other caregivers such as grandparents and domestic helpers, in order to better support ADHD families in Hong Kong.

References

- 1. Diagnostic and statistical manual of mental disorders: DSM-5. (2017). . American Psychiatric Association.
- Van Stralen, J. (2016). Emotional dysregulation in children with attention-deficit/hyperactivity disorder. ADHD Attention Deficit and Hyperactivity Disorders, 8(4), 175–187. https://doi.org/10.1007/s12402-016-0199-0
- 3. Miller, C. (2023, May 2). ADHD and Behavior Problems. https://childmind.org/article/adhd-behavior-problems/
- 4. Theule J., Wiener J., Tannock R., Jenkins J. M. Parenting stress in families of children with ADHD. *Journal of Emotional and Behavioral Disorders*. 2013;21(1):3–17. doi: 10.1177/1063426610387433.
- 5. Mohammadi, M. R., Soleimani, A. A., Ahmadi, N., & Davoodi, E. (2016). A Comparison of Effectiveness of Parent Behavioral Management Training and Methylphenidate on Reduction of Symptomsof Attention Deficit Hyperactivity Disorder. *Acta medica Iranica*, 54(8), 503–509.
- 6. Zhang, Y., Kang, C. Y., Zhao, X. R., Xuan, X., Ding, K. J., Liu, R. X., Wang, Y. J., Yang, R. X., Li, X. R., & Wan, S. (2014). Zhongguo dang dai er ke za zhi = Chinese journal of contemporary pediatrics, 16(2), 185–189.
- 7. Al Sehli SA, Helou M, Sultan MA. The Efficacy of Parent-Child Interaction Therapy (PCIT) in Children with Attention Problems, Hyperactivity, and Impulsivity in Dubai. Case Rep Psychiatry. 2021 Mar 4;2021:5588612. doi: 10.1155/2021/5588612. PMID: 33763275; PMCID: PMC7952151.
- 8. PCIT International. (2015). What is PCIT?. Official website for PCIT International and Parent-Child Interaction Therapy (PCIT). https://www.pcit.org/what-is-pcit.html
- 9. Nebraska Children and Families Foundation. (n.d.). Parent-child interaction therapy (PCIT): Evidence-based strategies: Our approach. https://www.nebraskachildren.org/our-approach/evidence-based-strategies/pcit.html
- Valero-Aguayo, L., Rodríguez-Bocanegra, M., Ferro-García, R., & Ascanio-Velasco, L. (2021). Meta-analysis of the Efficacy and Effectiveness of Parent Child Interaction Therapy (PCIT) for Child Behaviour Problems. Psicothema, 33(4), 544–555. https://doi.org/10.7334/psicothema2021.70
- 11. Gallagher, N. (2003). Effects of parent-child interaction therapy on young children with disruptive behavior disorders. Bridges: Practice-Based Research Syntheses, 1, 1-17.
- 12. Nebraska Children and Families Foundation. (n.d.). Parent-child interaction therapy (PCIT): Evidence-based strategies: Our approach. https://www.nebraskachildren.org/our-approach/evidence-based-strategies/pcit.html
- 13. Leung, C., Tsang, S., Sin, T. C., & Choi, S. (2014). The efficacy of parent–child interaction therapy with Chinese families. *Research on Social Work Practice*, 25(1), 117–128. https://doi.org/10.1177/1049731513519827
- PCIT International. (2015). What is PCIT?. Official website for PCIT International and Parent-Child Interaction Therapy (PCIT). https://www.pcit.org/what-is-pcit.html
- 15. Fernandez, M. A., & Eyberg, S. M. (2008). Predicting treatment and follow-up attrition in parent-child interaction therapy. *Journal of Abnormal Child Psychology*, 37(3), 431–441. https://doi.org/10.1007/s10802-008-9281-1