別添資料２

インフルエンザ対策と口腔ケア

サリドマイド薬禍者の皆様へ

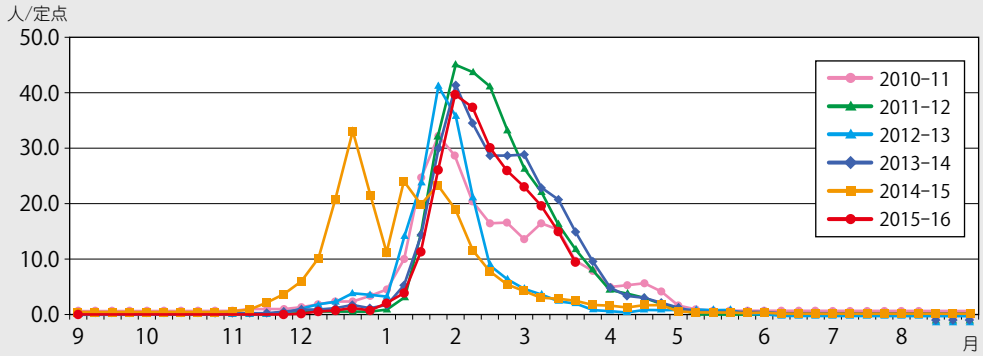
厚生労働科学研究
サリドマイド胎芽病患者の健康、生活実態の諸問題に関する研究班

●インフルエンザにかからないために -予防のコツ-　　長瀬　洋之　著
●お口の中を健やかに保つために -口腔ケアのすすめ-　丸岡　豊　著
日ノ下　文彦　編

インフルエンザにかからないために

Q1 インフルエンザはいつ流行する?

日本では、例年12月～3月頃に流行します。2月頃が流行のピークです。



インフルエンザ定点当たり患者報告数の推移（東京都健康安全研究センター）

Q2 インフルエンザはどのようにうつるのですか?

インフルエンザの感染経路には、飛沫感染と接触感染の2種類があります。

1. 飛沫感染は、感染した人がせきをして飛んだ飛沫に含まれるウイルスを、別の人が口や鼻から吸い込んでしまい、ウイルスが体内に入り込むことです。
2. 接触感染は、感染した人がせきを手で押さえた後や、鼻水を手でぬぐった後に、ドアノブなどに触れ、その場所に別の人が手で触れ、鼻、口に再び触れることにより、ウイルスが体内に入り感染することです。

Q3 インフルエンザにかからないためにはどうすればよいですか?

1. マスクをする、人混みへの外出を控える（飛沫感染対策）

インフルエンザが流行してきたら、人混みや繁華街への外出を控えましょう。また、人混みでは、マスクは有効ですが、人混みに入る時間は極力短くしましょう。

小耳症の場合、長いゴムのついたマスク（“小耳症用マスク”で検索、図1）、シリコンテープで頬に貼付して装着する、ひもなしマスク（“ひもなしマスク”で検索、図2）、なども市販されています。花粉症にも有効です。

図1. 長いゴムのマスク

図2. ひもなしマスク

予防のコツ

2. 外出後の手洗いや消毒（接触感染対策）

人が多く集まる場所から帰ってきたときには手洗いを心がけましょう。流水・石鹸による手洗いは、感染性胃腸炎の予防にも重要です。インフルエンザウイルスはアルコール消毒の効果が高いため、手をこすりあわせての手洗いが困難な場合は、アルコール製剤による消毒も有効です。ウェルパスなどのスプレータイプや、ソフティハンドクリーンなどのジェルタイプがあります。

ジェルタイプの場合、片手で操作し、塗布できる可能性があります。自動手指消毒器も数千円から市販されており（“手指消毒 自動”で検索、図3）、片手で操作が可能です。足指にも使える可能性があります。

図3. 自動手指消毒器

3. 適度な湿度

空気が乾燥すると、気道粘膜の防御機能が低下し、インフルエンザにかかりやすくなります。加湿器などを使って適切な湿度（50～60%）を保つことも効果的です。

4. 普段からの健康管理

栄養と睡眠を十分にとり、抵抗力を高めておくこともインフルエンザの発症を防ぐ効果があります。十分な休養とバランスのとれた栄養摂取を日ごろから心がけましょう。

5. インフルエンザワクチンによる予防接種

インフルエンザワクチンは、インフルエンザを発症する可能性を減らし、もし発症しても重症化するのを防ぐため、予防接種をおすすめします。効果が出るまでに2週間程度かかるため、12月中旬までに接種します。接種は1回で結構です。効果の持続は5か月ほどで、流行の型が変わるので、毎年の接種が望まれます。病原性の無い不活化ワクチンなので、予防接種でインフルエンザを発症することはありません。

副反応には、注射部位の赤み、はれが10～20%に、発熱、頭痛、だるさが5～10%に起こりますが、どちらも通常2～3日でなくなります。ショック症状などが見られることもありますが、まれです。念のため、接種後30分間は医療機関内で安静にしてください。重い副反応の報告がまれにありますが、原因がワクチンかどうかは、必ずしも明らかではありません。専門家の評価では、死亡とワクチン接種の明確な因果関係がある症例は認められず、死亡例のほとんどが、心臓や腎臓に重い持病をもつ御高齢の方でした。接種について心配な点は担当医に相談することができます。

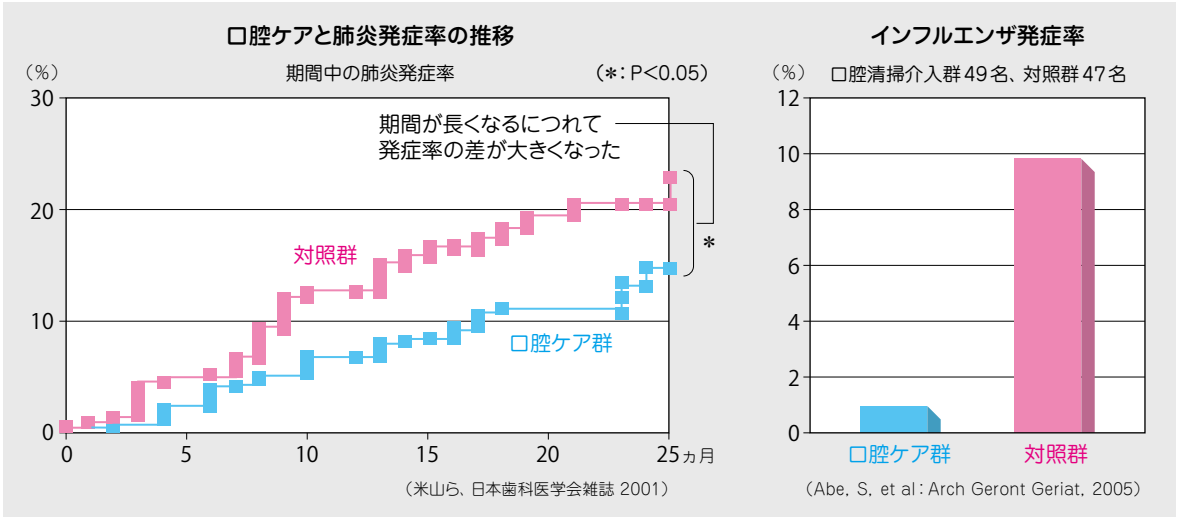
インフルエンザ　一問一答（厚生労働省健康局 結核感染症課）を参考に作成

お口の中を健やかに保つために

Q① 口の中をきれいにするとインフルエンザや肺炎にかかりにくくなるというのは本当ですか?

はい、本当です。

歯をきれいにするだけではなく、口の中全体や義歯なども広い範囲できれいに清潔に保つことを「口腔ケア」といいます。質の高い口腔ケアはむし歯や歯周病の予防のみならず、誤嚥性肺炎の予防やインフルエンザの発症予防に効果があることがわかっています（下図）。



口腔ケアにより、口の中のばい菌の数が減少すると以下に示す効果があると言われています。

1. むし歯や歯周病を予防する
2. 口腔疾患（口内炎、口腔疾患（口内炎、舌炎、カンジダ症など）の予防を図る
3. 口臭を取り除き、不快感をなくす
4. 誤嚥性肺炎（嚥下性肺炎）を予防する
5. 全身的な感染症（病巣感染）を予防する
6. 口唇、舌、頬、咽頭の刺激やマッサージによって、摂食・嚥下訓練の一助とする
7. 発音、構音に関与する口唇、舌、軟口蓋のリハビリテーションとなる
8. 唾液の分泌を促進し、自浄作用を促し、口腔の乾燥を防ぐ
9. 敏感な口腔を刺激することによって、全身の緊張をほぐす
10. 歯みがきによる上肢、手指のリハビリテーションを促す

（口腔ケアの目的：米山武義、菊谷 武：口腔ケア、建帛社 2005より一部抜粋）

また、糖尿病の治療や心臓血管疾患の発症減少、外科手術後の早期回復に貢献することも知られていて、がんの手術や放射線治療、化学療法などの前には歯科を受診し、口腔ケアを受けるようにする制度も徐々に定着し始めています。

口腔ケアのすすめ

Q2 どのように日常の口腔ケアをおこなったらよいのでしょうか?

通常の歯ブラシをつかっていただければけっこうですが、そのほかにスポンジブラシというものもあります（図4）。

まず、少し湿らせた後で歯ブラシと同じように口唇や頬粘膜、舌などをこすります。清掃効果のほか、マッサージ効果も期待できます。

最近では電動歯ブラシもその性能が向上しており、それをお使いになると効果的な口腔ケアが可能になります。大きく分けると回転式と超音波振動式がありますが、お好みでお使いになるといいでしょう。

デンタルフロスは、歯と歯の間を清掃するときに使います。糸ようじという名前でも売られていますが、ホルダー付きのものも売られており、こちらの方が使いやすいでしょう（図5）。また歯と歯のすきまが大きくなってしまった時には歯間ブラシの方が便利です（図6）。

また、まだ広くは使われていませんがもともとは腕の関節がうまくうごかせない患者さん用に開発された柄の長い歯ブラシも各種試作されており、これらを使ってもかなりの効果が期待できます。

（Nakagawa Y, Maruoka Y, et al. Long-handle toothbrush for haemophiliacs with severe elbow arthropathy, Haemophilia, 2015）

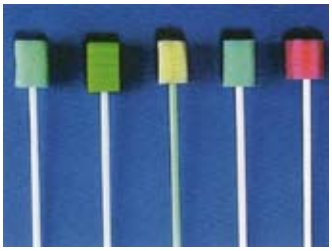


図4. スポンジブラシ

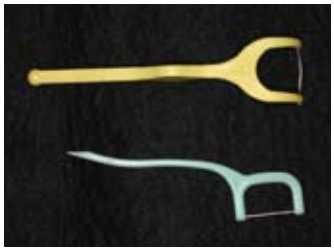


図5. 糸ようじ

図6. 歯間ブラシ

何も自覚症状がなくても最低年1回は歯科を受診し、早めの歯科治療や清掃指導などにより、日常的に不潔になりにくい口の中の環境を整えることはとても大切です。

別添資料３

Brief Report
"The Legacy of Thalidomide" - A Multidisciplinary Meeting Held at the University of York, United Kingdom, on September 30, 2016

Elizabeth Newbronner[1], Neil Vargesson*[2], and Karl Atkin[1]

Background: Between 1957 and 1962 thalidomide was used as a nonaddictive, nonbarbiturate sedative that also was successful in relieving the symptoms of morning sickness in early pregnancy. Infamously, thousands of babies were subsequently born with severe birth defects. The drug is used again, today, to successfully treat leprosy, and tragically, there is a new generation of thalidomide damaged children in Brazil. While the outward damage in babies has been documented, the effects of the damage upon the survivors as they grow up, the lifestyle changes and adaptations required to be made, as well as studies into ageing in survivors, has received little attention and remains understudied. **Methods:** A unique multidisciplinary meeting was organized at the University of York bringing together thalidomide survivors, clinicians, scientists, historians, and social scientists to discuss the past, the current and the future implications of thalidomide. **Results:** There is still much to learn from thalidomide, from its complex history and ongoing impact on peoples' lives today, to understanding its mechanism/s to aid future drug safety, to help identify new drugs retaining clinical benefit without the risk of causing embryopathy. **Conclusion:** For thalidomide survivors, the original impairments caused by the drug are compounded by the consequences of a lifetime of living with a rare disability, and early onset age-related health problems. This has profound implications for their quality of life and need for health and social care services. It is vital that these issues are addressed in research, and in clinical practice if thalidomide survivors are to "age well".

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Key words: thalidomide; thalidomide survivors; Thalidomide Society; thalidomide trust; Wellcome library; global health history; aging with early onset disability; drug safety

Introduction

Landmark papers in The Lancet by Dr. William McBride (McBride, 1961) and Dr. Widikund Lenz (Lenz, 1962) first drew the medical world's attention to thalidomide and the extensive damage the drug caused to babies when their mother took it to combat morning sickness in early pregnancy. In the immediate aftermath, much was written about the health of babies affected, the teratogenic effects of the drug, and the scientific and legal implications of the "thalidomide disaster" (Smithells and Newman, 1992). Given the drug is now used around the world again to successfully treat conditions like leprosy in Brazil, in 2014 a World Health Organization sponsored meeting of experts (World Health Organization, 2014; www.who-umc.org/graphics/28280.pdf) reexamined the diagnostic criteria of thalidomide embryopathy and the mechanisms of causation (Vargesson, 2015). This was in response to a new generation of thalidomide damaged children being seen in Brazil (Schuler-Facini et al., 2007; Vianna et al., 2011; Vargesson, 2013). Yet, the effects of the damage upon the survivors as they grow up has only recently started to be studied. It is really in the past decade, as thalidomide survivors reached their 50s, that there has been renewed interest in their health and in particular the effects of ageing with thalidomide embryopathy. In November 2015, a symposium organized by the University of Tokyo focused on clinicians conducting research into ageing and early onset age-related effects in people with thalidomide embryopathy (Honoshita, 2015).

However, the issues, both practical and clinical, affecting the day-to-day life of thalidomide survivors have rarely been discussed. In addition, an understanding of the long-term consequences of thalidomide embryopathy in survivors remains understudied. A recent meeting in September 2016 organized by Ms. Elizabeth Newbronner and Prof. Karl Atkin (Department of Health Sciences, University of York) and held at the University of York aimed to start a dialogue to begin to address these issues. The Meeting was a truly interdisciplinary gathering exploring the broader legacy of thalidomide. It brought together thalidomide survivors, historians, scientists, clinicians, and social scientists to explore what lessons can be learned from the history and use of the drug, its impact and ongoing consequences today; and how this knowledge can benefit thalidomide survivors and others with rare impairments.

[1]Department of Health Sciences, Faculty of Sciences, University of York, Area 2 Seebohm Rowntree Building, Heslington, York
[2]School of Medicine, Medical Sciences and Nutrition, Institute of Medical Sciences, University of Aberdeen, Foresterhill, Aberdeen

*Correspondence to: Neil Vargesson, School of Medicine, Medical Sciences and Nutrition, Institute of Medical Sciences, University of Aberdeen, Foresterhill, Aberdeen AB25 2ZD E-mail: n.vargesson@abdn.ac.uk

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Legacy of Thalidomide Meeting

The meeting had three sessions, each highlighting different perspectives: historical, contemporary, and personal. Professor Karl Atkin, Head of the Department of Health Sciences at the University of York, opened the day. He remarked on the importance of understanding the life course when making sense of long-term conditions, and in particular, how ageing with a disability creates specific disadvantages which need to be addressed.

The historical perspectives session began with a joint presentation by Dr. Ruth Blue, (Secretary of the Thalidomide Society and Curator at the Wellcome Library) and Mr. Brian Payne (Trustee of the Thalidomide Society; http://www.thalidomidesociety.org/). In their talk, *The Thalidomide Story: Archives and Voices*, they outlined the history of the Thalidomide Society and gave an overview of the practical work they are doing to conserve the history and advise researchers and the media. They also highlighted the wealth of thalidomide-related reports, papers, photographs, and films, held by the Wellcome Library (http://wellcomelibrary.org/). The archive also holds oral history recordings from thalidomide survivors and will soon hold recordings of parents who took the drug.

Dr. Julie Parle (Honorary Associate Professor in History, School of Social Sciences, University of KwaZulu-Natal, South Africa) a United Kingdom-born thalidomide survivor, gave a fascinating presentation on the research she and other historians have been doing on the "hidden histories" of thalidomide's distribution, impact, and use in African countries since the 1960s (Klausen and Parle, 2015). Her talk showed that thalidomide has many "shadow" histories around the world, even where it has not been proven to have directly affected mothers and babies, and how some thalidomide survivors are themselves now piecing these histories together, bit by bit. She argued that more archives need to be opened to researchers in pursuit of such histories.

The session concluded with a presentation about *Historic Photographs for Engagement and Outreach: Experiences from the Global Health Histories Project* by Dr. Alex Medcalf (Outreach Historian. Centre for Global Health Histories, Department of History, University of York; www.york.ac.uk/history/global-health-histories/). This project involves using visual images to tell a historical story. He highlighted some of the challenges and complexities they have faced in the project, in particular, the ethics of displaying difficult and sensitive material, and the importance of using the images to assist the argument or provoke additional questions.

The contemporary perspective session was opened by Dr. Neil Vargesson, (Senior Lecturer, School of Medicine, Medical Sciences and Nutrition, University of Aberdeen). In his presentation, *Thalidomide: Mechanisms of Action and Current Challenges*, he gave an overview of current opinion on the drug's mechanisms, in embryos and in adults (Vargesson, 2015). The drugs action on blood vessel formation, its ability to induce cell death and interact with Cereblon are widely accepted as mechanisms of the drug's action. Indeed, he described how the drug's actions on blood vessels can result in a range of limb damage (Vargesson, 2009, 2015; Vargesson and Hootnick, 2016). He also described the advances his team has made in finding a "safe" form of the drug, retaining the clinical benefits but without the side-effect of embryonic damage (Beedie et al., 2016a,b). This is extremely relevant today as sadly new generations of thalidomide children have been born in recent decades in Brazil as the original drug is used to treat a form of Leprosy (Schuler-Faccini et al., 2007; Vianna et al., 2011; Vargesson, 2013).

The contemporary health of thalidomide survivors in Sweden was discussed by Dr. Shadi Ghassemi Jahani (Consultant Orthopaedic Surgeon, Institute of Clinical Sciences, University of Gothenburg, Sweden). Dr. Ghassemi Jahani has been researching the orthopedic problems experienced by thalidomide survivors in Sweden as they age (Ghassami Jahani et al., 2014). She set out the findings from her work on osteoarthritis and cervical spine deterioration (Ghassami Jahani et al., 2016) and then went on to discuss her recent work on health-related quality of life. Her research showed that thalidomide survivors have significantly lower physical health-related quality of life compared with the general population.

Ms. Liz Newbronner (PhD student, Department of Health Sciences, University of York) then described her research on the contemporary health of thalidomide survivors in the United Kingdom. Despite the drug being distributed in 48 countries, little research into the health of thalidomide survivors as they age has been undertaken and the research that has been carried out is limited to just seven countries: Australia (Jankelowitz et al., 2013), Canada (Vermette and Benegabi, 2013), Germany (Peters et al., 2015), Ireland (O'Carroll et al., 2011), Japan (Shiga et al., 2015), Sweden (Ghassami Jahani et al., 2016), and the United Kingdom (Nicotra et al., 2016).

Findings from a new national health and well-being survey of U.K. thalidomide survivors (Newbronner and Baxter, 2016), undertaken for the Thalidomide Trust (http://www.thalidomidetrust.org/), were discussed. The data show that the health of thalidomide survivors is declining more rapidly than that of their peers in the general population. Although this experience is similar in many ways to other people with early onset disability, there are some distinctive aspects and pertinent wider lessons for health and care services. In particular, the complex nature of thalidomide damage and the implications of comorbidities, both of which call for a strongly collaborative approach between clinicians and thalidomide survivors.

In the final session of the day, three U.K. thalidomide survivors gave their personal reflections on living and ageing with thalidomide-induced damage. They highlighted the legacy of learning for thalidomide survivors across the world, other people with rare impairments (especially limb difference), and the clinicians and services that support them. Geoff Adams-Spink (Deputy Chair, European Dysmelia Reference Information Centre; http://www.dysnet.org/) discussed the power of networking between thalidomide survivors and others with limb difference. He emphasized the scope to use networking to address contemporary issues such as the need for peer support, the development of "workarounds" to support everyday tasks, and improved access to specialist health services. Mr. Rowland Bareham (Chairman, Thalidomide Trust National Advisory Council) focused on the experiences of thalidomide survivors with hearing damage. Around a third of thalidomide survivors have total or partial hearing loss and this "hidden" group of survivors often experience higher levels of poorer mental well-being. The day was closed by Dr. Craig Millward (Member, Thalidomide Trust National Advisory Council) who spoke movingly about finding out as a young adult that his disabilities had been caused by thalidomide, and how health problems in middle age had led him into greater involvement with the thalidomide community.

Conclusions

The meeting showed that there is still much to learn from thalidomide, both from its complex history and its impact on peoples' lives today. For thalidomide survivors, the original impairments caused by the drug are being compounded by the consequences of a lifetime of living with a rare disability, and early onset age-related health problems. Their health and functioning is changing, and this has profound implications for their quality of life and need for health and social care services. Clinicians and healthcare services often fail to understand the complex nature of thalidomide damage, nor do they always recognize the self-management knowledge thalidomide survivors have. It is vital that both these issues are addressed in research, and in clinical practice if thalidomide survivors are to "age well". Furthermore, the experience of thalidomide survivors provides lessons for supporting other people with rare impairments. In particular, there is a need for a flexible response which recognizes a person's active engagement with their condition and is sensitive to the consequences of the life course. Finally, the meeting was an important reminder of the continued need for research into drug safety and for pharmacovigilance.

Acknowledgements

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