

Kræftsår hos patienter med avanceret kræftsygdom

Et randomiseret interventionsstudium – kvantitative og kvalitative fund

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Kræftsår

- Forskning om kræftsår – et overset område. Litteratursøgning: 196, primært erfaringsbaseret, dog 3 randomiserede studier (Ashford et al. 1984, Bower et al. 1992, Leonard et al. 2001)
- 5-10% af kræftpatienter udvikler kræftsår – underliggende tumor infiltrerer hud og væv, eller som metastaser (Adderley & Smith 2007)
- Ikke blot brystkræft, dog 80% i RCT- studiet var brystkræftsår – samme ætiologi som ved andre kræftdiagnoser (Wilson 2005)
- Primært patienter > 60 år – fremskreden kræftsygdom (Grocott 2007)
- Kræftsår – palliation er typisk det mulige opnåelige mål (Alexander 2009)

Eksempler på kræftsår fra pilotstudiet



Eksempler på kræftsår fra RCT-studiet



Sårrelaterede problemer ved kræftsår



- ***Eksudation***
- ***Lugt***
- Blødning
- Smerter
- Infektion/kolonisering
- Psykosociale problemstillinger:
 - Depression
 - ***Skam***
 - Ændret body-image, kvindelighed, seksualitet
 - Social isolation

Avanceret kræftsygdom

■ **Symptomer og bivirkninger:**

- Fatigue
- Smerter
- Ernæringsproblemer
- Kvalme og opkastninger
- Slimhindeproblemer
- Lymfødem
- Oplevelse af angst og depression m.fl.

Behandling af kræftsår

- Antineoplastisk behandling
 - Kemoterapi
 - Antihormonbehandling
 - Strålebehandling
 - M.fl. (immunterapi osv.)
- Optimal sårbehandling – fugtig sårheling
- Psykosocial og åndelig omsorg

Pilotstudiet ph.d.-afhandling 1. del

Artikel I og II

research

Qualitative and quantitative evaluation of a new regimen for malignant wounds in women with advanced breast cancer

- **Objective:** To investigate the experience of women with advanced breast cancer who have a malignant fungating wound and to test the benefits of a structured, evidence-based, management regimen, combined with psychosocial support.
- **Method:** Twelve women with advanced breast cancer were consecutively selected for inclusion in a four-week intervention. The patients were interviewed and the condition of the wounds was recorded before and after the intervention.
- **Results:** Prior to the intervention, participants were anxious about seepage, bleeding and odour emanating from the wounds and were concerned these might be obvious to others. After the intervention, nine wounds (75%) showed an improvement, with increased granulation and epithelialisation and complete wound healing in one participant. Seepage was considerably reduced in 83% of cases and there was an average 75% reduction in dressing changes. The women's sense of well-being improved, as did their independence and self-confidence.
- **Conclusion:** A wound-care intervention built on evidence-based practice and psychosocial support resulted in an improvement in 75% of the wounds, and increased the women's sense of well-being, independence and security.
- **Declaration of interests:** This study was funded by the National University Hospital of Denmark's Corporation Fund and the Novo Nordisk Clinical Nursing Research Fund. Wound-care products were sponsored by Smith & Nephew A/S and Johnson & Johnson A/S.

breast cancer; malignant fungating wounds; wound management; female perspective; daily life

Malignant fungating wounds have physiological and psychosocial consequences, including seepage, malodour,¹ bleeding,² pain,³ infection,⁴ depression and altered body image.⁵ The incidence in patients with breast cancer is low at 2–9%,^{6,7} and these wounds are generally neglected in terms of management guidelines,^{8,9} with care and treatment being ad hoc and unstructured.¹⁰

A literature search of Medline, CINAHL and Cancersid found only six relevant research-based studies^{11–16} and a smaller number of case reports or anecdotal evidence.¹⁷ While some authors have described treatment principles,^{18,19} the literature lacks specific information, particularly on wound-care products that could facilitate optimal healing and meet the patient's physical and psychological needs. This study set out to investigate these issues.

The intervention
Over a four-week period we tested a specific intervention, which comprised:

- a systematic and structured wound treatment, built on existing knowledge and consensus

of care.^{14,20} The wound-care treatment given was outlined in Box 1. Following the intervention period, responsibility for wound care was transferred to the home care nurse, who was informed about the patient via a nursing care report.

- Dialogue between the women and the clinical nurse adviser — these focused on the impact of the wounds on the women's daily lives.

Method

Research design
The research intervention, which formed part of a larger study, was prospective and exploratory. The results presented here pertain to quantitative and qualitative aspects of the treatment studied.

Subjects and recruitment
Twelve women with advanced breast cancer receiving treatment at the oncology departments at the National University Hospital of Denmark and Næstved Hospital participated.

The mean age of the women was 68.5 years (range: 57–88). They had had breast cancer for a mean of 8.2 years (range: 0.3–26). The cancer had meta-

stasised to the lymph nodes, distant sites, or both. The women were recruited through the oncology departments at the National University Hospital of Denmark and Næstved Hospital.

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CANCER CARE

Malignant wounds in women with breast cancer: feminine and sexual perspectives

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LUND-NIELSEN B, MÜLLER K & ADAMSEN L (2005) *Journal of Clinical Nursing* 14, 56–64

Malignant wounds in women with breast cancer: feminine and sexual perspectives
Aims and objectives: The aim of this article is to investigate the way malignant fungating wounds affect femininity, sexuality and daily life in women with progressive breast cancer. Malignant wounds occur when the underlying localized tumour filtrates into the skin, blood capillaries and/or lymph vessels.

Design: The study was a prospective and exploratory intervention study. The intervention was tested on 12 consecutively selected women with progressive breast cancer and malignant fungating wounds.

Methods: The 12 women participated in a 4-week wound care intervention programme that comprised evidence-based wound care principles and psychosocial support. Data were generated by means of interviewing prior to and following the intervention period.

Results: The women described how malodorous and oozing wounds trigger anxiety about seepage, prevent them from wearing feminine attire and cause them to suppress the need for physical closeness and sexual activity. The results showed that by using modern wound care products, the patients could be secured against seepage and odour. The women experienced a sense of comfort, were able to dress again as they wished, so koger felt caged in and isolated and were given a sense of freedom which they had not felt for a long time.

Conclusions: The intervention succeeded in increasing breast cancer patients' psychosocial well-being and reducing social isolation.

Relevance to clinical practice: There is a lack of standard methods of practice for care of malignant wounds in women with breast cancer. This article describes an intervention for wound care which could improve daily life in women with progressive breast cancer.

Key words: breast cancer, female perspective, femininity and daily life, malignant fungating wounds, sexuality

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- Tolv kvinder med avanceret brystkræft og kræftsår
- Inklusion: Onkologisk afdeling ved Rigshospitalet og Næstved sygehus

Formål:

- At udvikle en systematisk og struktureret sårbehandling
- At sygeplejen blev ensartet baseret på viden, kvalitet og kontinuitet

Intervention i hjemmet over fire uger

I: Lund-Nielsen B; Müller K; Adamsen L.
Journal of Wound Care, 2005

II: Lund-Nielsen B; Müller K; Adamsen L.
Journal of Clinical Nursing, 2005

Intervention og metoder i pilotprojektet

■ **Intervention**

- **Viden** (litteratursøgning)
- **Kontinuitet** (BLN samt ansat sårsygeplejersker)
- **Moderne sårhelingsprincipper** (fugtig sårheling, beskytte mod kontaminering, fjerne nekroser, opfylde patientens ønsker og behov)
- **Moderne sårbehandlingsprodukter** (bl.a. sølv/kulbandage, skumbandage)
- **Samtale om psykosociale emner** (1 time pr. uge). Erfaringer fra onkologisk afdeling – samlet fysisk + psykosocial indsats

• **Metoder**

- Sår morfologi-registreringsark
- Foto
- Semi-strukturerede interviews

Artikel II: Kvindelighed og seksualitet

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- Semistrukturerede interviews med 12 kvinder
- Kvinderne oplevede påvirkning af kvindelighed og seksualitet på grund af de ildelugtende og væskende kræftsår.
- Angsten for gennemsvivning havde indflydelse på deres tøjvalg.
- Kvinderne oplevede social isolation
- Kvinderne vurderede bandagerne som effektfulde overfor lugt og eksudation – gav frihed og sikkerhed

Resultater fra pilotprojektet - Artikel I

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References

- 1 Crockett, P. The palliative management of legging malignant wounds. *J Wound Care* 2000; 9: 14–9.
- 2 Haighton, W., Young, T. Common problems in wound care: malodorous wounds. *BJ Nurs* 1995; 4: 16, 109–10.

• Hos 7 ud af 12 kvinder blev sårstørrelsen mindre – hos én kvinde ophelede såret fuldstændigt

• Hos 9 ud af 12 kvinder blev såret mere vaskulariseret

• Hos 7 ud af 12 kvinder fremstod såret med øget granulationsvæv

Resultater - pilotprojektet fotoeksempler før/efter intervention



Sår 1
Før 3,0 x 5,5 cm

Sår 2
Før 4,0 x 9,0 cm



Før: 9,5 x 14,0 cm



Før 15,0 x 16,0 cm



Sår 1 og 2
Efter 0 cm



Efter 7,8 x 10,8 cm



Efter 8,0 x 15,0 cm

Konklusion på pilotstudiet

- Interventionen indikerede, at kunne forbedre sårets fysiologiske tilstand og øge kvindernes uafhængighed og tryghed
- Kvinderne oplevede fysiske, psykosociale problemer
- Kvinderne efterlyste at de professionelle havde viden og interesse for sårene – og at de tog ansvar
- Lugtgener, påvirket kropsopfattelse, angst og følelse af stigmatisering var fortsat et problem

Kræftsår hos patienter med avanceret kræftsygdom.

Et randomiseret interventionsstudium – kvantitative og kvalitative fund

- Et helhedsorienteret projekt tilrettelagt som et hypotesetestende, prospektivt, randomiseret, interventionsstudium samt en eksplorativ kvalitativ interviewundersøgelse.

Patient - optagerområde



- 75 kræftpatienter af begge køn med kræftsår fra forskellige kræftdiagnoser inkluderes fra onkologiske afdelinger ved Rigshospitalet, og sygehusene i Hillerød, Herlev, Roskilde, Næstved, Odense, Århus, Vejle, Esbjerg, Sønderborg samt hospice i Odense, sårafdelingen i Viborg, og Øre-næse-hals-afdelingen i Køge
- Patienterne behandles i deres hjem over fire uger af BLN og ansatte sårsygeplejersker samt af hjemmesygeplejersker

Inklusion og eksklusionskriterier

Inklusion:

- Kræftpatienter med fremskreden sygdom og kræftsår
- Mænd og kvinder over 18 år, i ambulant behandling/kontrol
- Sårstørrelse $> 1,5 \text{ cm}^2$

Eksklusion:

- Kræftpatienter med forventet levetid < 3 måneder
- Kræftpatienter der modtog strålebehandling på sårområdet. Der skulle være gået > 3 måneder efter afsluttet strålebehandling på sårområdet før inklusion
- Kræftpatienter med demens og/eller psykose

Formål

- Få viden om, hvorvidt behandlingsmulighederne ved kræftsår kan forbedres ved at sammenligne effekten af to typer fysisk-psykosocial intervention begge anvendt i fire uger:

Sølvbandage >< Honningbandage

begge i kombination med kognitive samtaler + afspændingstræning

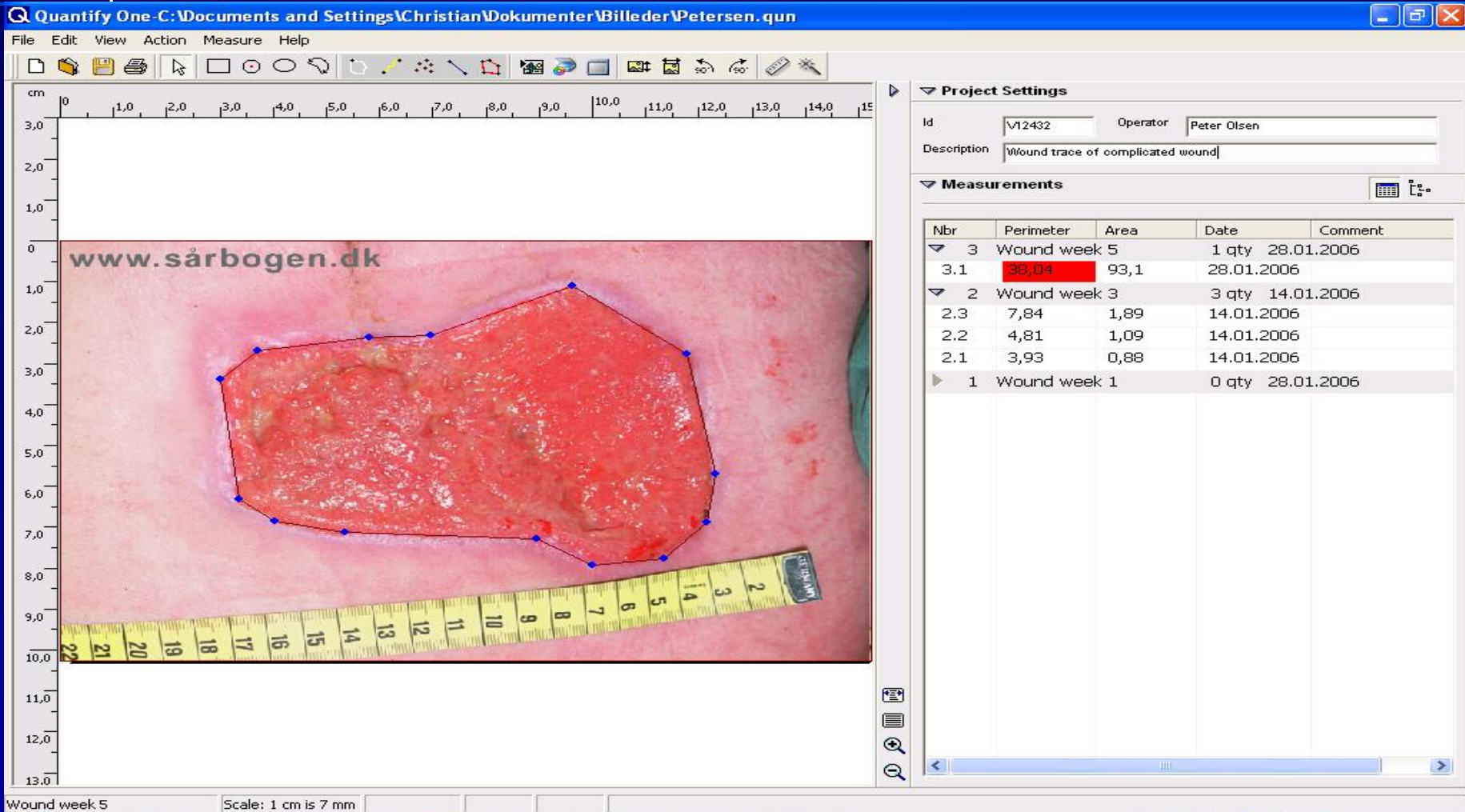
Hypotese - metoder

Hypotese	Metoder	Triangulering
Intervention med: <i>honingbandager i kombination med kognitive samtaler og afspændingstræning</i> har større effekt end <i>sølvbandager i kombination med kognitive samtaler og afspændingstræning</i> på:		
Primært outcome-mål: <i>Sårstørrelse</i> (som et tegn på sårheling)	<ul style="list-style-type: none"> Foto – digital. Software-program Quantify Image Central (mm²-præcision) 	
Sårrelaterede sekundære outcome-mål: <i>Renhedsgrad</i> – øget granulationsvæv og vaskularisering samt reduceret nekrotisk væv og fibrin <i>Kolonisering/infektion</i> i såret <i>Lugt</i> <i>Eksudation</i> <i>Sårsmertes</i>	<ul style="list-style-type: none"> Foto – ”blindede” sårsygeplejersker. Overensstemmelse vurderet via Cohen Kappa score Kvalitative sårpodninger VRS – fire gradueringer samt VAS-scale VRS – fire gradueringer samt VAS-scale VAS-scale 	
Sekundære outcome-mål: <i>Angst og depression</i> <i>Mestring</i> <i>Livskvalitet (Health related QOL)</i>	<ul style="list-style-type: none"> Hospital Anxiety and Depression Scale (HADS) Mini-Mental Adjustment to Cancer (Mini-MAC) EORTC-QLQ-C30- Quality of Life 	
Formålet var endvidere at belyse karakteren af psykosociale problemer samt kropslige og psykiske reaktioner	<ul style="list-style-type: none"> Semistrukturerede kvalitative interviews 	

Quantify Image Central

Quantify One - C:\Documents and Settings\Christian\Dokumenter\Billeder\Petersen.qun

File Edit View Action Measure Help



cm 0 1,0 2,0 3,0 4,0 5,0 6,0 7,0 8,0 9,0 10,0 11,0 12,0 13,0 14,0 15

www.sarbogen.dk

Project Settings

Id: V12432 Operator: Peter Olsen

Description: Wound trace of complicated wound

Measurements

Nbr	Perimeter	Area	Date	Comment
3	Wound week 5	1 qty	28.01.2006	
3.1	38,04	93,1	28.01.2006	
2	Wound week 3	3 qty	14.01.2006	
2.3	7,84	1,89	14.01.2006	
2.2	4,81	1,09	14.01.2006	
2.1	3,93	0,88	14.01.2006	
1	Wound week 1	0 qty	28.01.2006	

Wound week 5 Scale: 1 cm is 7 mm

start Quantify One Microsoft PowerPoint ... tracing - Notesblok DA 62% 16:16

Intervention i RCT-studiet

Intervention	Interventionsperiode (28 dage)
<p>1. Moderne sårbehandlingsprincipper:</p> <ul style="list-style-type: none"> • Rensning med vandhanevand og medicinsk sæbe, kirurgisk pincet og Metzenbaum saks: • Sårbehandling der sikrer fugtig sårheling: <p><i>Manuka honning (Algivon(Activon tulle)</i> <i>Absorberende bandage (Sorbion/Drymax)</i> <i>Skin-Prep barriererfilm</i> <i>Skumbandage (Allevyn Adhesive)</i></p> <p><i>Eller</i></p> <p><i>Sølvbandage (Acticoat/Acticoat Absorbent)</i> <i>Skin-prep barriererfilm</i> <i>Skumbandage (Allevyn Adhesive)</i></p>	<p>Sårbehandlingen udføres i hjemmet hver 2-3. dag over ca. 1-1½ time ved hver besøg</p> <p>Sårbehandling udføres af BLN i samarbejde med sårsygeplejersker samt hjemmesygeplejersker</p>
<p>2. Samtaler struktureret ud fra den kognitive model:</p> <p>Støttende samtaler om mestring af sygdomssituationen med kræftsåret og psykosociale problemstillinger</p>	<p>1 times samtale ugentlig med BLN</p>
<p>3. Afspændingstræning: indtalte CD'er med musik og afspændingsøvelser</p>	<p>20 minutters afspændingstræning hver til hver anden dag</p>

Kontinuitet

Viden (pilotprojektet + litteratur-søgning)

Moderne sårhelingsprincipper og produkter (honning eller sølv i kombination med skumbandager)

Samtaler ud fra den kognitive model

Afspændingstræning

Valg af bandager i pilot og RCT

- Lugt – det overskyggende problem i pilot
- I pilot: sølv-kul-bandage, skumbandager
- Sølv som "standard-behandling" i RTC overfor honning – evidens!
- Honning på tube direkte på såroverfladen. Såvel honningalginat som sølvalginat,
- Også tulles/polyester-polyethylen-meche. Afhængig af efter sårets ætiologi (dybde, kaviteter, nekrotisk væv, fibrin, eksudationsmængde) samt skiftefrekvens.
- Skumbandager – fugtig sårheling



Sølvbandager (Fong & Wood 2006, Jørgensen et al. 2006, Bergin & Wraight 2006)



Ulemper:

- Sort afsmitning på væv
- Sårsmarter
- Allergi
- Tungmetal – miljø
- Resistens (Lansdown & Williams 2007)

■ Nanokrystalliseret sølv

Fordele:

- Skaber bredspektret antimikrobiel barrierer (>150 patogener) med frigivelse af Ag⁺ ved kontakt med fugtigt miljø
- Ag⁺ blokerer patogenernes optagelse af næringsstoffer samt respiration
- Patogenernes cellemembran ødelægges når Ag⁺ bindes til proteiner i cellevæg
- Patogener forhindres i formering ved at Ag⁺ bindes til bakteriens DNA
- Virker antiinflammatorisk



Honningprodukter

(Molan 2006, Dunford 2005, Gethin & Cowman 2008, Cooper 2011)



Honning (Manuka)

- *Leptospermum Scoparium*-plantearter fra New Zealand

Fordele:

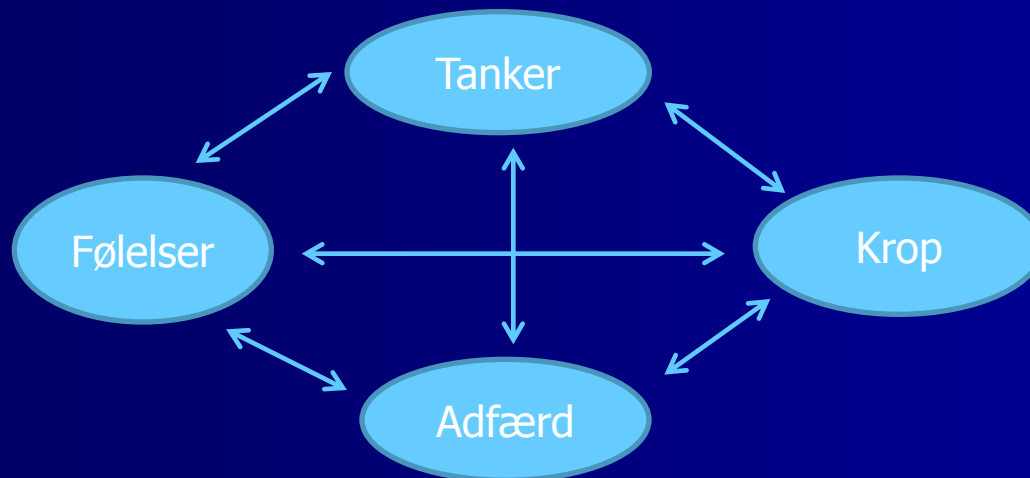
- UMF 12+ - antibakterielle effekt sammenlignet med phenolkoncentration
- Højt sukkerindhold – osmotisk rensende
- Stimulerer angiogenese og dannelse af fibroblaster
- Surt sårmiljø (ph-værdi 3,4 – 6,1)
- Hydrogenperoxid i små mængder
- Antimikrobielle planteprodukter
- Ikke-toksisk på væv
- Ingen resistens (Cooper et al. 2010)

Ulemper:

- Sårsmarter – syreindhold stimulerer nociceptorer til smerterespons
- Lugt af honning – "fedtet"
- Allergi

Kognitiv Intervention

- Kognitiv terapi er udviklet af psykiater Aaron Beck til depressive patienter. (Beck et al. 1979). Negative automatiske tanker om sig selv, verdenen og fremtiden, som accepteres som sande. Disse udfordres – mere positive tanker – mindre depression.
- Den kognitive diamant - redskab i samtalen
- Kognitive samtaler til kræftpatienter med formålet at:reducere kræftrelateret angst og depression samt stress, øge mestringsevne , forbedre kommunikation mellem patient og partner (Moorey & Greer 2006)
- Afspændingstræning – Effekt på angst og depression, søvnproblemer og afledning fra svære tanker (Wolpe 1969, Benson & Klipper 2000, Cheung et al. 2003, Baider 2001)



Resultater – RCT-studiet

- Ingen statistisk signifikant forskel på honning- og sølvbandager på sårstørrelse, renhedsgrad, eksudation, lugt, smerte og bakteriologi.

- På poolede data (n=69) sås:
 - sårstørrelsesreduktion hos 62%
 - Øget renhedsgrad hos 58%

- To sår ophelede – lille areal og overfladiske (2,44 cm² og 1,98cm²)

The effect of honey-coated bandages compared with silver-coated bandages on treatment of malignant wounds—a randomized study

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ABSTRACT

Malignant wounds (MWs) occur in 5–10% of all cancer patients. Malodor and exudation are the most common side effects. The aim was to determine the influence of honey-coated compared with silver-coated bandages on treatment of MWs. Patients were randomly selected to enter either group A (honey-coated bandages) or group B (silver-coated bandages). Parameters were the following: wound size, cleanliness, malodor, exudation, and wound pain. Digital photographs, visual analog scales (VAS), and wound morphology registration were used for measurement at baseline and following the 4-week intervention. Sixty-nine patients with MWs and advanced cancer, aged 47–90 (median 65.6), were included. No statistically significant difference was noted between the groups with respect to wound size, degree of cleanliness, exudation, malodor, and wound pain. There was a median decrease in wound size of 15 cm² and 8 cm² in group A and B, respectively ($p = 0.63$). Based on post-intervention pooled data from the groups, improvement was seen in 62% of the participants with respect to wound size and in 58% ($n = 69$) with respect to cleanliness. The VAS score for malodor ($p = 0.007$) and exudation ($p < 0.0001$) improved significantly post-intervention.

Patients with reduced wound size had a median survival time of 387 days compared with 134 days in patients with no wound reduction ($p = 0.003$). The use of honey-coated and silver-coated bandages improved the outcome of MWs. No differences were found between the two regimens. Both types of bandages are recommended for use by patients with MWs containing tumor debris and necrosis.

In the literature, malignant wounds (MWs) are described as chronic wounds that occur in 5–10% of all cancer patients.¹ MWs are most often seen in connection with breast cancer, head and neck cancer, and in advanced cancer cases.² These wounds occur when a tumor penetrates the skin or via metastases.³ MWs are often located in a previously irradiated area and have a negative influence on wound healing.⁴ An MW typically remains inflamed due to the presence of tumor tissue in the wound bed. Malodor and exudation are the most common and burdensome problems for patients with MWs.^{5–7} Psychosocial problems are also evident such as changed body image, shame, depression, and social isolation.^{8–9}

Guidelines for treating MWs are usually developed based on experience rather than on evidence from randomized clinical trials (RCTs).¹⁰ Research in lacking on treatment strategies and wound care products that facilitate healing and that meet the patient's physical and psychosocial needs.¹¹

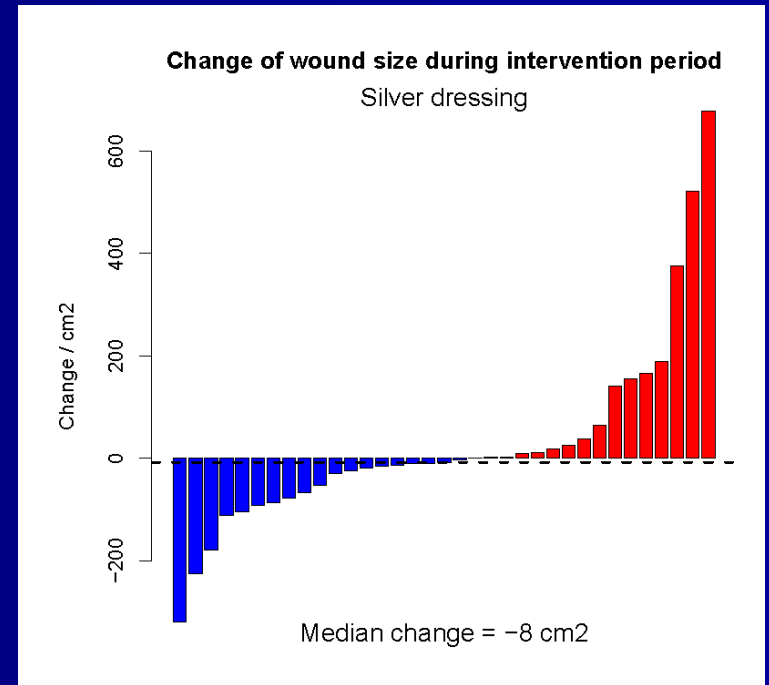
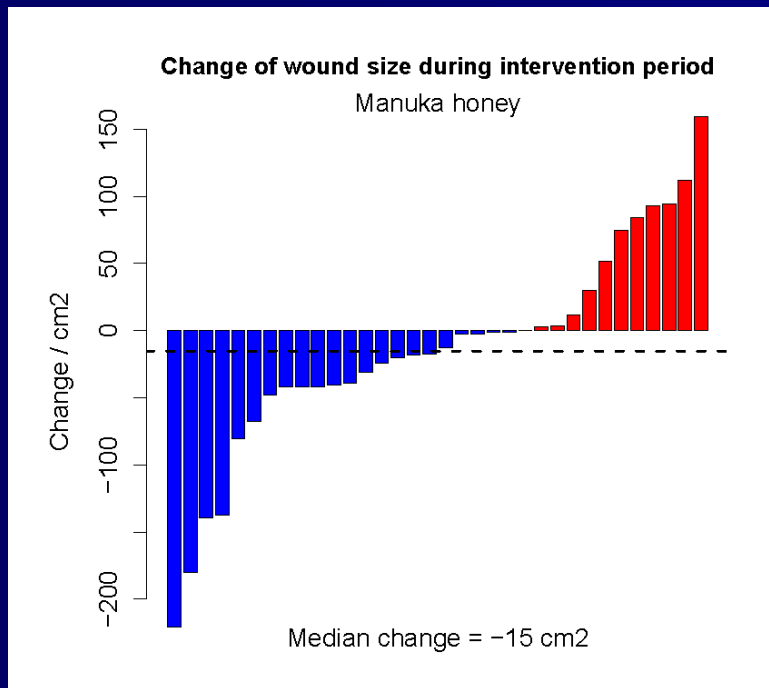
The application of carbon-silver-coated bandages has shown increased tissue granulation and epithelialization in

nine of 12 women with MWs and advanced breast cancer. The women's sense of well-being improved as did their self-confidence due to the psychosocial support offered to them in parallel with the wound care.^{12,13} This regimen was "standard practice" for these patients; however, larger randomized studies are needed to confirm the effectiveness of this treatment compared with other regimens.

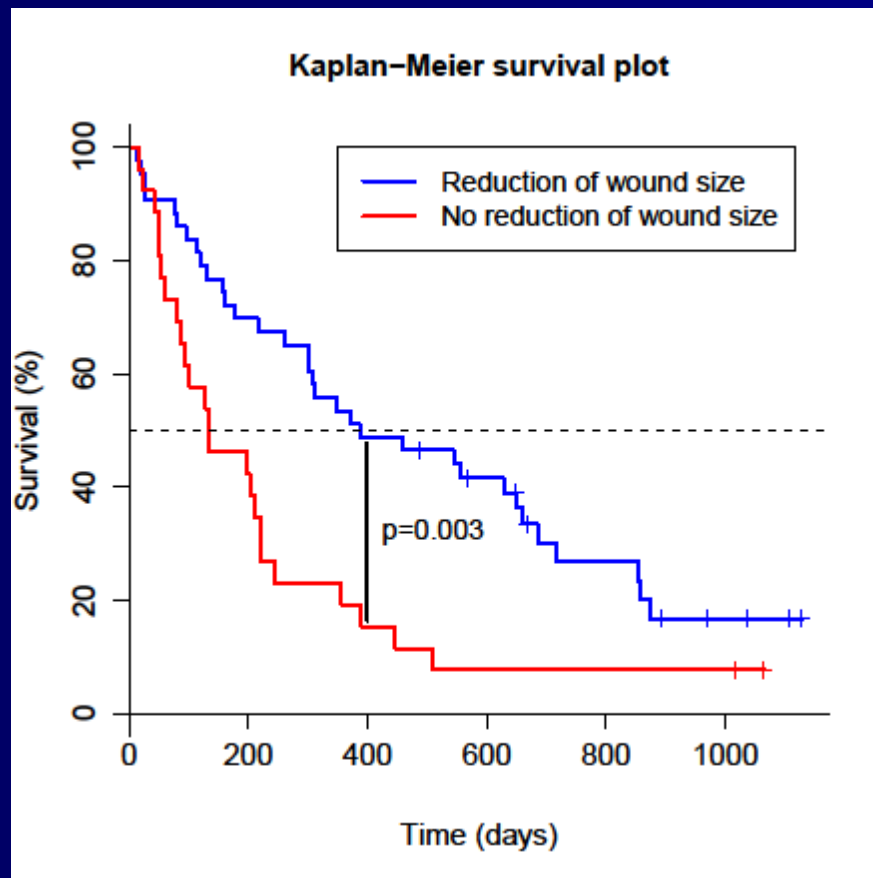
Silver-coated bandages have shown antiseptic, antimicrobial, and anti-inflammatory properties when applied to chronic non-MWs.^{14–16} Furthermore, honey-coated bandages have also shown pain-relieving properties in non-MWs beyond their effectiveness in cleansing, antimicrobial, antiodor, and anti-exudation.^{17–20} To our knowledge, research on the use of honey-coated bandages for MWs has not been previously published.

The aim of this RCT study is to test the effect of honey-coated bandages vs. silver-coated bandages on wound size, cleanliness, malodor, exudation, and wound pain in patients with MWs and advanced stage cancer.

Resultater - sårstørrelse



Ændring i sårstørrelsen og overlevelse



- Patienter med reduceret sårstørrelse fra før til efter intervention havde en median overlevelse på 387 dage sammenlignet med 134 dage for patienter med ingen reduktion i sårstørrelsen ($p=0.003$)

Resultater – lugt, eksudation, angst og depression

- Der var statistisk signifikant forbedring på begge behandlinger af patienternes vurdering af:
 - lugt ($p=0.007$)
 - eksudation ($p<0.0001$)
 - angst ($p=0.007$)
 - depression ($p=0.049$)
- Lugt målt på VRS på begge behandlinger: $p=0,036$

Artikel IV: Bakteriologi – sølv og honning

FEATURE

Qualitative Bacteriology in Malignant Wounds— A Prospective, Randomized, Clinical Study to Compare the Effect of Honey and Silver Dressings

Betina Lund-Nielsen, MHS; Lis Adamsen, PhD; Finn Gottrup, MD; Mikael Rørth, MD; Anders Tolver, PhD; and Hans Jørn Kolmos, MD

Abstract

Between 5% and 10% of cancer patients develop malignant wounds. *In vitro* and some clinical studies suggest that silver- or honey-coated dressings may have an antibacterial effect in nonmalignant wounds, but their possible antibacterial effect in malignant wounds remains unknown. A prospective, randomized, single-blind controlled clinical study was conducted to evaluate the bacteriology of malignant wounds and compare the effect of a honey-coated (Group A) to a silver-coated (Group B) dressing on the qualitative bacteriology of malignant wounds. All wound interventions were performed by the same healthcare professional. Swab cultures were obtained at baseline and following a 4-week intervention and were evaluated without information about the patient treatment group. Of the 75 patients with advanced cancer and malignant wounds identified, 67 (34 in group A, 33 in group B; median age 64 years, range 47–92) consented to participate and completed the 4-week study. The majority were women (88%) with breast cancer (79%). No statistically significant differences were found between the type and number of different wound pathogens in the wounds during the course of the study or between Group A and Group B. Neither anti-neoplastic nor antibiotic treatment influenced the presence of wound pathogens. *Staphylococci* were found in 42%, enteric bacteria in 34%, anaerobic bacteria in 16%, *Pseudomonas* in 10%, and hemolytic streptococci in 6% of wounds at baseline; in total, 25 different bacterial species were identified. Sixty-one percent (61%) of wounds decreased in size following treatment, but no significant differences were observed between the type and variety of wound pathogens and whether wound size decreased. Although quantitative bacteriological changes may have occurred, the possible antibacterial effect of the honey or silver dressing could not be confirmed in these malignant wounds. Routine wound swabbing of malignant wounds is of little value and should be restricted to cases where signs of infection requiring antibiotic intervention are observed or where resistant organisms require special infection control measures.

Key Words: randomized controlled study, malignant wound, cultures, honey-coated dressing, silver-coated dressing

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Potential Conflicts of Interest: none disclosed

An estimated 5% to 10% of all cancer patients develop malignant wounds.¹ The wounds that often occur in advanced stage cancer result from tumors that infiltrate the skin and underlying tissues.² The base of the malignant wound is characterized by the presence of necrotic and tumor tissue, slough, and fibrin, stimulating the growth of anaerobic bacteria that can produce odor and infection in the wound.^{3,4} Complete healing, as a rule, is not a realistic outcome in this

type of patient due to the presence of cancer tissue in the wound base.⁵

One could speculate that if dressings with antibacterial properties could reduce the growth of bacteria and resultant odor in the malignant wound, optimal healing could be facilitated. Both honey^{6,7} and silver dressings⁸ have shown antibacterial effects in other chronic wounds such as leg ulcers, but there is no evidence from randomized clinical trials (RCTs)⁹

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- Ingen statistisk signifikant forskel på sårpatogener fundet over tid mellem sølv og honning
- Ingen indflydelse af anti-neoplastisk behandling eller antibiotika på bakteriologien
- 97% af sårene var koloniseret med mindst én bakterie (median 2 (range 1-4).
Anbefaling: Ingen podninger med mindre generelt tegn på infektion
- Der blev fundet 25 forskellige slags bakterier i sårene. *Stafylokokker* blev fundet i 42%, Enterobakterier i 34% og *Pseudomonas* i 10% af sårene

IV: Lund-Nielsen B; Adamsen L;
Gottrup F; Rørth M; Tolver A, Kolmos HJ
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Artikel V: Ignorering af brystkræftsår – Health Care Avoidance

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An Avalanche of Ignoring—A Qualitative Study of Health Care Avoidance in Women With Malignant Breast Cancer Wounds

KEY WORDS

Breast cancer
Cancer wounds
Caregiver burden
Health care avoidance in oncology
Interview
Malignant wounds
Phenomenology
Qualitative

Background: A contributing factor to development of malignant wounds is patient-related delay caused by health care avoidance. **Objectives:** The purpose of this study was to describe the experience of health care avoidance in women with advanced breast cancer who have developed malignant wounds. **Methods:** A qualitative study was conducted based on semistructured interviews. Seventeen women with advanced breast cancer (median age, 69 years; range, 47–90 years) who had avoided medical treatment despite development of malignant wounds participated. Systematic text-condensation analysis was used. **Results:** The women deliberately avoided health care for a median of 24 months (minimum, 3 months; maximum, 84 months). Despite being aware of the development of a malignant wound from a breast lump, the women avoided health care because of negative health care experiences and extremely burdening life situations. The women did not seek health care until their situations became unmanageable. The essence—"an avalanche of ignoring"—is pointing to the escalating, powerful development of destructive feelings behind health care avoidance. **Conclusions:** Health care avoidance may be a way of coping both for women who are primary and/or bereaved caregivers. Oncologists and nurses may contribute to the prevention

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Health Care Avoidance on Breast Cancer Wounds

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- Interview i RTC-studiet – nogle patienter reagerer anderledes – ignorering grundet Health Care Avoidance. Fænomenet forfølges.
- Saturation efter interview med 12 kvinder – interview med 17 – terapeutisk effekt (skyld og skam)
- 31% af brystkræftpatienterne i RCT-studiet reagerede med ignorering og hemmeligholdelse.
- Kvinderne undgik bevidst at søge lægehjælp i 24 måneder (median) (range 3-84 måneder), og søgte først lægehjælp ved alvorlige kropslige symptomer som spontan knoglefraktur, dyspnøe (lungemetastaser) eller sårblødninger.



Konklusion

- Ingen statistisk signifikant forskel mellem sølv- og honningbandager
- En sårstørrelsesreduktion hos 62% og øget renhedsgrad hos 58% over tid indikerer en forbedret sårhelingsproces
- En statistisk signifikant reduktion af lugt, eksudation, angst og depression på begge behandlinger forbedrede patienternes velbefindende og deres samlede situation
- Resultaterne indikerede, at en intervention med sølv- eller honningbandager suppleret med kognitive samtaler og afspændingstræning må overvejes som fremtidigt behandlingstilbud til patienter med kræftsår og avanceret kræftsygdom

Kliniske implikationer – et forsknings- og implementeringsprojekt

For i fremtiden at sikre patienter med kræftsår den bedst mulige behandling:

- Oprettelse af et "Videncenter for kræftsår" på Rigshospitalet med regionsfunktion/landsdelsfunktion
- Patientbehandling ud fra resultaterne i ph.d.-afhandlingen (direkte samt tele-medicinsk funktion).
- Yderligere forskning og udvikling
- Undervisning på såruddannelser/kurser, samt vejledning i afdelingerne
- Udarbejdelse af landsdækkende samt international guidelines.
- Udarbejdelse af informationsmateriale til pårørende om vigtigheden af at reagere på egne sygdomstegn.

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