Wound Closure by Perioperative Specialist Practitioner

This guidance does not override the individual responsibility of health professionals to make appropriate decision according to the circumstances of the individual patient in consultation with the patient and/or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

After most operations the skin incision is closed by sutures, in an attempt to obtain healing by first intention. If the skin edges are closely approximated, without tension, healing will generally occur in 10 days. A simple linear incision is closed by re-apposing the edged of the skin that were separated. Skin may be closed using an absorbable or non absorbable thread mounted on fine eye-less, cutting edged needled. Sutures may be subcuticular or interrupted, the choice will depend on the individual patient and the wound to be closed

This guideline is for use by the following staff groups:

Perioperative Specialist Practitioner

Lead Clinician(s)	
Mr M Corlett	Consultant Surgeon
Mr N Purser	Consultant Surgeon
Guideline reviewed and approved by Theatres/Anaesthetic Governance on:	17th April 2024
Review Date This is the most current document and is to be used until a revised version is available:	17th April 2027

Key amendments to this guideline

Date	Amendment	By:
March 2005	Guideline approved by Clinical Effectiveness Committee	
Oct 2006	Guideline reviewed with no amendments made to content	W Rutherford
June 2008	Guideline reviewed and approved by medicines Safety Committee	
Sep 2008	Guideline reviewed and revised by clinical leads and pharmacy	Mr Corlett Dr Millett
April 2012	No changes made, expiry extended for a period of 2 years.	W Rutherford
May 2014	Guideline reviewed with no amendments made to content	S.Milllett/N.Purser N.Hickey/W.Rutherford
August 2016	Document extended for 12 months as per TMC paper approved on 22nd July 2015	TMC
August 2017	Document extended for 12 months as per TMC paper approved on 22nd July 2015	TMC
June 2018	Document extended for 3 months as per TLG recommendation	TLG
July 2018	Document reviewed and approved with no changes	N Purser
August 2020	Document extended for 6 months during COVID period	WGC/Gold Meeting
February 2021	Document extended as per Trust agreement 11.02.2021	
March 2021	Document reviewed and approved with no changes	SCS Directorate Governance
April, 2024	Document reviewed and approved with no changes.	

Wound closure by perioperative specialist practitioner

Introduction

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Competencies Required

Competent Perioperative Specialist Practitioner (PSP) may undertake suturing of surgical wounds.

The PSP will be able to:

- Outline the basic physiology of the skin
- Identify factors that may delay wound healing
- Identify equipment required
- Describe infection control precautions, before, during and post surgery
- Identify factors influencing choice of suture material
- Be able to give correct discharge advice
- Achieve competency as demonstrated by training and assessment with consultant mentors, supported by documentation

Patients Covered

Patients the Consultant / Registrar consider suitable for wound closure/named minor surgical procedure by PSP

The PSP may close the wound of a patient whose operation they have been assisting the surgeon with on the request of the surgeon. As such the PSP would have already performed hand washing and gown and gloving and be using equipment prepared by the “scrub” nurse.

Alternatively, The PSP may be performing a named minor surgical procedure; again it is likely an assistant will prepare equipment.

Details of Guideline for Wound Closure by PSP

Planning

- Ensure a safe, comfortable environment for patient and staff.
- Check patient details, including sensitivities
- Explain the procedure to the patient.
- If the procedure is to be performed by the PSP, obtain consent.
- Prepare equipment

Equipment

- Sterile Field
- Surgical set containing:
  - Needle holder
  - Scissors
  - Tissue forceps

- Antiseptic
- Sterile swabs
- Sterile drapes
- Suture material
- Syringes
- Needles, green, blue, orange
- Local anaesthetic 1% lidocaine
- Sterile gloves
- Sharps bin
- Advice leaflet

Surgical scrubbing will be performed as per Worcestershire NHS Trust Guidelines

The wound will have been cleaned with antiseptic solution and where necessary local anaesthetic administered as per Patient Group Direction/Protocol for the administration of 1% lidocaine or bupivacaine/adrenaline and PSP guidelines for the administration of local anaesthetic.

Interrupted Stitches Using a Curved Needle

If right handed, mount the needle in the jaws of a needle holder, point to the left, “eye” to the right.

Both “points” upwards, convexity down.

Grip the shank of the needle, near the junction of the middle third and the third in which the thread is inserted.
Insert the needle from left to right, or towards yourself, starting with the hand pronated, the needle will point downwards, at a 90 degree angle to the skin, driven through the tissues in a curved path by progressively supinating the wrist, taking a full thickness bite.

When sufficient needle emerges it will be grasped, away from the point, with forceps to help draw it through, replacing the needle in the holder a little nearer the swaged end to help draw it through if necessary.

While steadying the needle with dissecting forceps the needle holder will be moved from the swaged end of the needle and re-applied on the shank of the emerging needle, with the needle then drawn along its curved path.

This will be repeated on the wound edge directly opposite.

Skin edges will be opposed, without too much tension, to minimise scaring.

The threads will be tied using a reef knot.

A series of interrupted sutures will be inserted starting at the middle of the wound and then moving to the middle of each half, placed at even intervals along the wound.

Subcuticular Suturing

This suture will snake too and fro, parallel to the skin surface

The needle is inserted through the skin about 1-2 cm away from but in line with the incision, it is passed under the skin to emerge in the subcuticular layer on one side of the wound It is

then passed backwards and forwards across the wound, eventually emerging beyond the other end of the incision, corresponding to where the suture commenced. By the application to traction to both ends of the suture the skin edges are approximated. The remaining part of the suture is tied.

If an absorbable suture material is used the suture is knotted beneath the skin at both edges of the incision.

Once the procedure is complete, the wound will be cleaned and dried and a suitable dressing applied

Equipment will be disposed of following infection control guidelines. Sharps will be disposed of in a sharps bin and instruments returned to CSSD for re-sterilising.

Information for care of the wound will be supplied to the patient.

References

- *Basic Surgical Technique.* RM Kirk (1994) Churchill Livingstone.
- *Minor Surgery.* J.S. Brown (2000) Arnold
- *Farquharson's Textbook of Operative Surgery*. RF Rintoul (1995) Churchill Livingstone
- Accident and Emergency Guideline for Minor Suturing K Haynes K Elliker Worcestershire Acute NHS Trust 2003

Contribution List

Key individuals involved in developing the document

Name	Designation
F Breakwell	Perioperative Specialist Practitioner
W Rutherford	Perioperative Specialist Practitioner
Mr M Corlett	Consultant Surgeon
Mr N Purser	Consultant Surgeon

Circulated to the following individuals for comments

Name	Designation
R Overfield	Director of Nursing
V England	Surgical Directorate Manager
Mr C Tallents	Clinical Director Treatment Center
Alison Smith	Principal Pharmacist Medicines Safety

Circulated to the following CD's/Heads of dept for comments from their directorates / departments

Name	Directorate / Department

Circulated to the chair of the following committee's / groups for comments

Name	Committee / group
Paul Benham	Medicines Safety Committee

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and included as an appendix to key document when submitted to the appropriate committee for consideration and approval.

Please complete assessment form on next page;

Worcestershire Acute Hospitals NHS Trust

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	x	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	

Details of individuals completing this assessment	**Name**	**Job title**	**e-mail contact**
	Wayne Rutherford	**Surgical Care Practitioner**	**Wayne.rutherford1@nhs.net**
Date assessment completed	**10/04/2024**		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	**Title:** Wound Closure by Perioperative Specialist Practitioner			
What is the aim, purpose and/or intended outcomes of this Activity?	Close surgical wounds			
Who will be affected by the	x❑	Service User	x❑	Staff

development & implementation of this activity?	x❑ ❑ ❑	Patient Carers Visitors	❑ ❑ ❑	Communities Other _____
Is this:	x❑ Review of an existing activity ❑ New activity ❑ Planning to withdraw or reduce a service, activity or presence?			
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.	Policy review Reflection			
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	Surgical colleagues			
Summary of relevant findings				

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale**. Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		√		
Disability		√		
Gender Reassignment		√		
Marriage & Civil Partnerships		√		
Pregnancy & Maternity		√		
Race including Traveling Communities		√		
Religion & Belief		√		

Equality Group	Potential positive impact	Potential neutral impact	Potential negative impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Sex		√		
Sexual Orientation		√		
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		√		
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		√		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
	Unable to close wound	*.Contact supervising on site consultant*	**Practitioner**	**Stat**
How will you monitor these actions?	**Data collection within surgical log book, reflective writing**			
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	**Next update**			

Section 5 - Please read and agree to the following Equality Statement

1. Equality Statement

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation
1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.
1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	Wayne Rutherford
Date signed	10/04/2024
Comments:	
Signature of person the Leader Person for this activity	
Date signed	
Comments:	

Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	No
2.	Does the implementation of this document require additional revenue	No
3.	Does the implementation of this document require additional manpower	No
4.	Does the implementation of this document release any manpower costs through a change in practice	No
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	No
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval