BSSCII

British Society for Skin Care

In Immunosuppressed Individuals

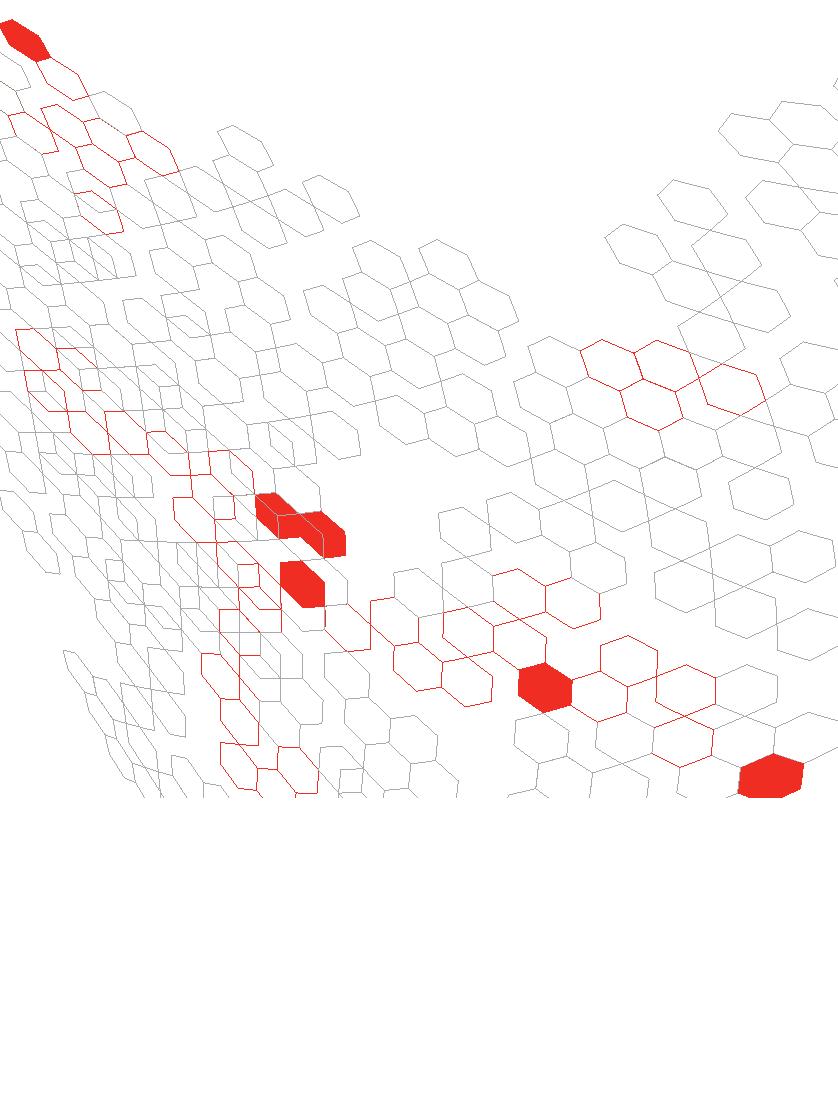
Patient information

Skin care after

an organ transplant

Also for those who have a

suppressed immune system



Contents

www.bartshealth.nhs.uk

Introduction

............................................................................................................................

4

About the transplant skin clinic

........................................................

5–7

Common skin conditions after transplant

....................

8–31

This booklet has been produced by

Barts Health NHS Trust and funded

by Barts Charity.

List of conditions

.....................................................................................................................

8

Skin cancer prevention

..........................................................................

32–36

Skin self-examination

Body diagrams

Sun protection and vitamin D

..........................................................................................

32–34

......................................................................................................................

35

36

................................................................................

www.bartscharity.org.uk

Dermatology department contact numbers

Further information

Patient diary

....................

37

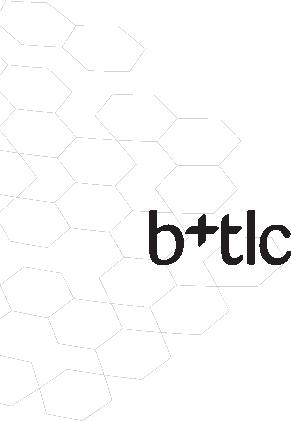
37

................................................................................................

...........................................................................................................

38–43

3



Introduction

About the transplant skin clinic

at Barts Health NHS Trust

You are more likely to suffer from various skin problems after an

organ transplant because you are taking immunosuppressive

(anti-rejection) drugs. Your body is less able to ﬁght certain skin

conditions effectively, mainly because your immune system is

being suppressed.

The transplant skin clinic is part of the dermatology

department. It is run by dermatologists for monitoring,

preventing and treating skin problems in patients who have

had an organ transplant or who are immunosuppressed

(immunocompromised) for other reasons.

This booklet has been produced to help you look after your

skin following a transplant. Much of the advice is also appropriate

for people who have a suppressed immune system due to other

causes such as chronic lymphocytic leukaemia (CLL) and HIV,

and for those awaiting an organ transplant.

It is one of the biggest centres for this specialty in the UK.

Our doctors and nurses aim to see you within 12 months of

your transplant to alert you to any possible skin problems

that might arise, and to assess your individual risk for skin

cancer. They will give you advice and guidance on how to look

after your skin. Depending on your risk factors and individual

needs, you will be advised how frequently you need to be

seen thereafter – usually between one and ﬁve years.

The booklet gives you information on what signs and symptoms

to look out for, and describes the treatment for a variety of

skin conditions. There is also a useful chapter on skin cancer

prevention including how to examine your skin and protect

yourself from exposure to the sun.

An important part of the work of this clinic is research on

skin disease and skin cancer after transplantation, with a

view to preventing and improving these conditions. We may

ask whether you would be willing to participate in one of the

research studies being undertaken by the clinic.

At the back is a patient diary for you to write down the outcome

of your clinic visits and any comments about your skin condition.

Please bring this booklet with you when you come to the

transplant skin clinic.

4

5

How often will I be seen in the clinic?

Follow-up appointments

This will depend upon your risk of developing skin problems.

Our aim is to detect new or suspicious skin lumps early so that

we can treat them as soon as possible.

For some of you the risk of developing skin problems is so low

that we will not need to see you routinely. We ask only that

you self-examine your skin and request a referral back to us if

there are any concerns.

At your ﬁrst appointment we will assess your risk of developing

skin cancer. This is based on:

Other patients need to be seen at regular intervals. This may

be as little as once every 5 years, every 18 months or as

much as every 3 months. We will let you know when your

appointments should be made.

• Your age

• Your age at transplantation

• How easily you burn in the sun

• Your history of sun exposure

• How often you have suffered sunburn

• Any pre-existing skin problems

The frequency of your visits may change over the course of

your care. If you develop a skin cancer you will need to be

seen more often.

Between appointments

For everyone regular self-examination of the skin is essential

so that problems, especially skin cancer, can be detected

early and treated. How to examine your skin is described on

pages 32–35.

If you have a skin lesion that changes over time, or develop a

new skin mark, please ask a health professional for advice or

ring us. Our contact numbers are on page 37.

6

7

Common skin conditions after a transplant

Delayed wound healing and fragile skin

Some patients may notice thinning of the skin with increased bruising.

This is usually due to medication, in particular the use of steroids.

Cuts and abrasions may take longer to heal.

This is a list of the most common skin conditions found after transplant

surgery. Each of these skin problems is described on the pages

shown below. Do look through them to familiarise yourself with

the skin conditions you might possibly develop as some are

potentially serious.

Acne

Delayed wound healing and fragile skin

...............

9

Spots are common in the ﬁrst 12–18 months after transplantation,

particularly in younger patients. They usually settle down as the

dosage of immunosuppressive (anti-rejection) drugs is lowered.

Acne

......................................................................................................

9

Sebaceous gland hyperplasia

....................................

10

Fungal infection of the skin and nails

Pityriasis versicolor (yeast infection)

Other infections

Viral warts

Benign (harmless) skin lumps

Pre-cancerous skin lesions

Skin cancer

..........

11–12

Treatment for acne

.....................

13

Simple topical preparations such as creams, ointments, lotions and

gels maybe all that is required. Some of these can be obtained

over the counter after speaking to a pharmacist, and others can be

prescribed by your GP.

...............................................................

14–15

16–17

18–19

20–23

24–31

.............................................................................

...........................

If these types of treatment do not control the acne, antibiotics may

be required from your GP or dermatologist. For very severe acne a

dermatologist may prescribe Isotretinoin.

.................................

..........................................................................

All skin conditions that require urgent medical assessment have

been indicated by a red Asterisk

If you develop any skin problem that you are worried about you can:

• Contact the dermatology department

• Speak to one of the transplant nurses if your renal transplant was

carried out at this Trust

• Make an appointment with your GP

• Go to your local A&E department if your symptoms are severe

Under each skin condition some indication is given of whom you

should contact ﬁrst for treatment.

8

9



Sebaceous gland hyperplasia (SGH)

Fungal infection of the skin and nails

SGH is very common after an organ transplant. As shown in the

photograph, it appears as small (2–4mm in diameter), raised, whitish/

yellowish bumps on the skin, especially on the forehead, nose and

cheeks. The bumps are due to benign overgrowth of sebaceous (oil)

glands probably caused by immunosuppressive drugs.

Fungal infection of the skin on the feet

(tinea pedis or athlete’s foot)

A very common condition that usually appears as scaly patches on the

feet and a red/white rash between the toes, both of which can be itchy.

Treatment for SGH

Treatment for athlete’s foot

Nothing needs to be done about SGH unless the bumps are a

signiﬁcant cosmetic problem. There is no easy treatment.

Creams are available over the counter from your pharmacist or can be

prescribed by your GP.

Fungal infection of the nails (onychomycosis)

Infection appears as areas of yellow or white patches under and within

the toenail. It can push the nail up off the nail bed.

Treatment for onychomycosis

If treatment is needed, your GP may use lacquers (nail paint) that can

take up to a year to work. For severe infection you may need a course

of tablets, prescribed by your GP or dermatologist, to be taken over

several months.

Sebaceous gland

hyperplasia

Fungal

infection of

the toenails

10

11



Fungal infection of the skin (tinea corporis or ringworm)

Pityriasis versicolor (yeast infection)

This appears as red, scaly, itchy patches on the body. It can

appear anywhere but is especially common on the trunk and in

the groin region.

This common yeast infection of the skin usually affects the chest

and back. As shown in the photograph, it often appears as slightly

itchy, scaly patches, which may be pale pink or brown in colour.

It is most common in the ﬁrst one to two years after a transplant.

Treatment for ringworm

It is important to have a diagnosis from a doctor before beginning

treatment so if you think you have ringworm contact your GP in

the ﬁrst instance. Treatment is usually the application of a cream

or shampoo.

Treatment for yeast infection

Treatment usually involves washing with an anti-fungal shampoo

and using an anti-fungal cream for several weeks. Sometimes

it may be necessary to use an anti-fungal tablet as well.

Ringworm

on the arm

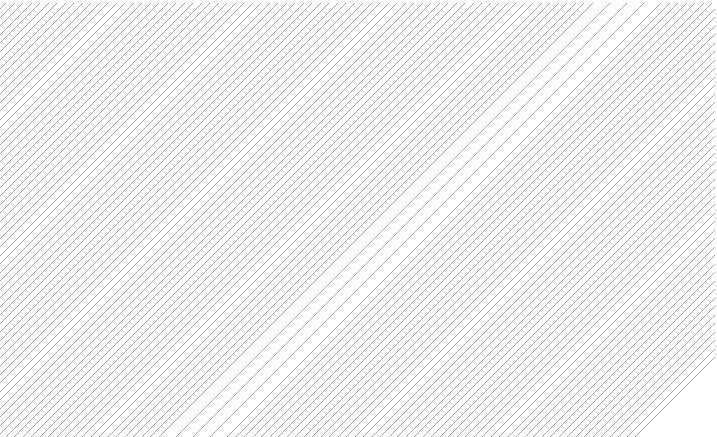
Pityriasis

versicolor

on the back

12

13



Other infections

Shingles and chickenpox (herpes zoster and varicella)]

Cold sores (herpes simplex)

Shingles and chickenpox are caused by the same virus. Both

can be more serious in people who have had a transplant.

Cold sores are very common and can cause more problems after

a transplant. They usually appear as painful blisters or ulcers that

always come back in the same part of the body such as on the lips,

nose or buttocks.

Shingles usually appears as a painful, blistering rash on a particular

area of the body, for example one side of the chest, the arm or on

one side of the face. Chickenpox is usually associated with feeling

unwell and a more widespread rash which eventually blisters.

Treatment for cold sores

Cold sores may need treatment with antiviral creams available over

the counter from a pharmacist. If they are still causing a problem

see your GP, who might prescribe tablets, and if they become very

troublesome contact your dermatologist.

Treatment for shingles and chickenpox

Treatment mainly involves antiviral medication but it is not

always required.

Shingles on

the right side

of the back

Cold sore in

the nose

]

If you think you may have developed either shingles or

chickenpox, especially if you have any form of blistering

rash, you should seek medical attention immediately.

Both are contagious and people with shingles can cause

chickenpox in those who have not previously had it.

14

15



Viral warts

Warts on

These are very common after transplantation and are caused by

the human papillomavirus (HPV). Some people develop just one

or two warts – often on the hands or feet – while others can develop

large numbers that need specialist care. On the feet they are

known as verrucas.

the ﬁngers

Treatment for viral warts

Warts and verrucas can be difﬁcult to treat in organ transplant patients

but your GP or dermatologist will usually recommend one or all of the

following in the ﬁrst instance:

• Salicylic acid preparations (e.g. Salactol, Compound W, Cuplex,

Verrugon, Occlusal)

If none of these treatments work, more aggressive therapy may be

recommended such as:

• Freezing (cryotherapy)

• Efudix (5-ﬂuorouracil) cream

• Vitamin A creams (e.g. Retin A)

• Aldara (imiquimod) cream

Some very troublesome warts may need to be surgically removed,

but there is a risk that they may come back again. Very occasionally

reducing the amount of anti-rejection drugs taken, or using a tablet

called Acitretin, can help control warts. On the whole the aim is to

control rather than cure warts after a transplant.

16

17



Benign (harmless) skin lumps

Seborrhoeic warts

Campbell de morgan spots (cherry angiomas)

These are harmless lesions with a warty, greasy, ‘stuck-on’

appearance. Seborrhoeic warts often appear on the back and chest

but they can appear anywhere on the skin, and there may be many

of them.

These are harmless overgrowths of blood vessels and do not require

treatment. They look like tiny, red, raised spots and are common on

the chest and abdomen, but can appear on any part of the body.

Treatment for seborrhoeic warts

Seborrhoeic warts do not usually require treatment but if they are

causing problems the warts can be frozen off (cryotherapy) or

removed surgically.

Seborrhoeic

wart

Campbell de

morgan spots

18

19



Pre-cancerous skin lesions

Actinic keratosis

Actinic keratosis (AK)

This is also known as solar keratosis as it tends to occur on

sun-exposed sites such as the hands, face and scalp. It appears as

small, dry, ﬂaky patches of skin, some of which can have a crust.

Sometimes this crust can fall off leaving a red area underneath.

Solar keratosis is usually painless but may be slightly itchy. If you

develop any tenderness or pain in the area you should seek medical

advice from your dermatologist.

The presence of actinic keratosis may be a sign that you are at

increased risk of skin cancer, and the condition has the potential

to develop into skin cancer. It is usually assessed and treated, if

necessary, within the dermatology department.

Treatment for actinic keratosis

Treatment includes the following options:

• Observation (watchful waiting)

• Freezing (cryotherapy)

• Solaraze (hyaluronic acid) gel

• Efudix (5-ﬂuorouracil) cream

• Aldara (imiquimod) cream

• Surgical removal

• Photodynamic therapy (PDT)

20

21



Bowen’s disease (carcinoma in situ)

Porokeratosis

Bowen’s disease or squamous cell carcinoma in situ (CIS) is commonly

found on the lower legs, hands, forearms and face. It appears as

crusty/scaly areas of reddened skin that may look a little like patches

of psoriasis, eczema or fungal infection. These areas can range in size

from small lesions the size of a pea, to large areas almost covering the

back of a hand. They can sometimes ulcerate.

Porokeratosis appears as raised, sometimes scaly, red rings.

They are often found on the lower legs and may look like patches

of psoriasis or fungal infection.

Very rarely porokeratosis can develop into a skin cancer, so if you

suspect the condition please contact the dermatology department

for advice.

The presence of Bowen’s disease may be a sign that you are at

increased risk of skin cancer, and these lesions have the potential to

develop into skin cancer. They are usually assessed, diagnosed and

treated, if necessary, within the dermatology department.

Treatment for porokeratosis

Treatment includes the following options:

• Observation (watchful waiting)

• Freezing (cryotherapy)

Treatment for Bowen’s disease

Treatment includes the following options:

• Efudix (5-ﬂuorouracil) cream

• Aldara (imiquimod) cream

• Photodynamic therapy (PDT)

• Observation (watchful waiting)

• Freezing (cryotherapy)

• Efudix (5-ﬂuorouracil) cream

• Aldara (imiquimod) cream

• Photodynamic therapy (PDT)

• Curettage and cautery

(minor surgery)

Bowen’s disease

Porokeratosis

22

23



Skin cancer

Melanoma]

The four main types of skin cancer common in organ transplant

recipients are:

Melanoma is an uncommon tumour in organ transplant patients but it

is important to catch it early as melanoma can spread. Melanoma can

arise from a longstanding mole, or from a new mole that wasn’t there

before. If you notice any change in the shape, size, or colour of a

longstanding mole, or if you develop a new mole, it should be

examined by a dermatologist.

• Melanoma

• Squamous cell carcinoma (SCC)

• Basal cell carcinoma (BCC)

• Kaposi’s sarcoma (KS)

Treatment for melanoma

Surgery is the best treatment for melanoma.

All four types occur more frequently after transplantation, but the most

common are squamous and basal cell carcinomas.

The main cause of skin cancers is a combination of exposure to the

sun, which may have happened many years earlier, and

immunosuppressive drugs used to stop the transplanted organ from

being rejected.

Melanoma

Risk factors for skin cancer include:

• How long ago you were given a transplant. The longer you have

had your transplant, the greater the risk. About 50% of people who

have had a transplant for more than 20 years will develop some

form of skin cancer. However, it takes an average of eight to 10

years for skin cancer to ﬁrst appear.

• Age at transplantation. People over 50 years old when they were

given a transplant are at greater risk than people who were younger.

• Fair skin. Those with a tendency to burn and freckle in the sun are

at greater risk of skin cancer.

• High levels of sun exposure in the past. People at greater risk are

outdoor workers, those with outside hobbies, sunbathers, people

who have lived abroad somewhere sunny or have had many holidays

abroad, and sun bed users. A history of repeated sunburn is a

particular risk.

]

If you think that you may have melanoma, telephone

any of the dermatology department contact numbers

listed on page 37 as you will need to see

a dermatologist.

• The presence of actinic keratosis or Bowen’s disease.

24

25



Squamous cell carcinoma (SCC)]

Squamous cell

carcinomas

Squamous cell carcinoma is the most common skin cancer in

transplanted patients, especially those with fair skin.

SCCs appear as red, crusty, raised lumps, bumps or ulcers.

Sometimes they may look like warts with a red base. They can be

tender or painful and they may bleed. SCCs can grow quite quickly,

for example double in size within two to three months, but this is not

always the case.

SCC is most common on areas of the body that are regularly exposed

to the sun, such as the face, ears, hands, and lower legs in women.

Transplant patients will often go on to develop more SCCs after the

first one appears.

Treatment for squamous cell carcinoma

There are four treatment options:

1. Surgical removal. These lesions can usually be removed by surgery

in the dermatology department. If the skin cancer is big, or in a difﬁcult

area such as the ears or eyes, plastic surgery may be necessary

combined with skin grafting. If left to grow, SCC can inﬁltrate deeper

and spread to the lymph glands.

2. Radiotherapy. This is occasionally used as an alternative, or in

addition, to surgery.

3. A reduction in immunosuppressive drugs. Sometimes organ

transplant patients can develop multiple squamous cell carcinomas.

If this occurs the dermatologists may ﬁnd out from the transplant

doctors whether it would be possible to reduce the dose of

immunosuppressive drugs.

]

4. Acitretin. In some cases a drug called acitretin may be prescribed to

slow down and prevent the development of these skin cancers.

If you think that you may have a squamous cell

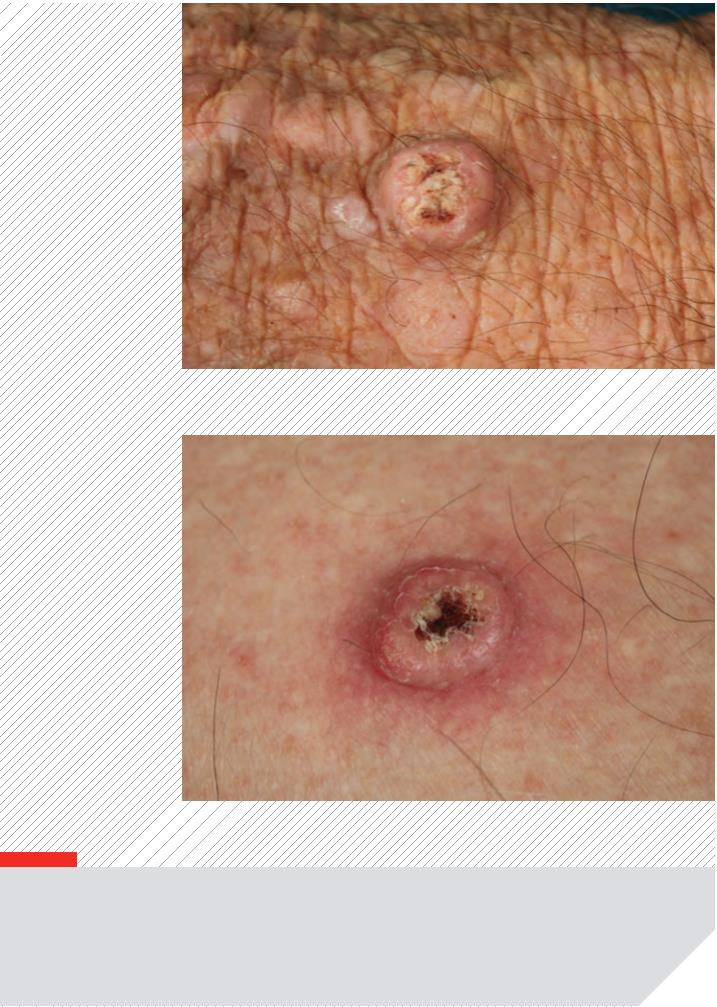
carcinoma, telephone any of the dermatology department

contact numbers listed on page 37 as you will need to

see a dermatologist.

26

27



Basal cell carcinoma (BCC)]

Basal cell

Basal cell carcinoma lesions usually appear as shiny/pearly lumps

and are commonly found on the upper body and face, but they can

develop elsewhere. Occasionally they appear as crusting, sore areas

of skin that do not heal. The majority grow slowly and can take up to

a year to double in size.

carcinomas

Treatment for basal cell carcinoma

The treatment options are:

• Surgery

• Aldara (imiquimod) cream or Efudix (5- ﬂuorouracil) cream

• Cryotherapy

• Radiotherapy

]

If you think that you may have a basal cell carcinoma,

telephone any of the dermatology department contact

numbers listed on page 37 as you will need to see

a dermatologist.

28

29



Kaposi’s sarcoma (KS)]

Kaposi’s

sarcoma

People from Africa, the Middle East, the Mediterranean and the

Caribbean have a higher risk of developing a type of skin cancer

known as Kaposi’s sarcoma. It is caused by human herpes virus

(HHV8), which is very common in these areas. The virus is often

picked up in childhood and lies dormant in the body until it is

reactivated and causes KS. This sarcoma tends to develop within

the ﬁrst ﬁve years of transplant.

Kaposi’s sarcoma may start with swelling of a limb, usually the

lower leg, and/or the development of dark lumps or spots.

These are commonly found on the legs and feet but can appear

anywhere. They are usually dark brown or purple but they can be

any colour from light brown to deep purple.

Treatment for Kaposi’s sarcoma

]

If you think that you may have Kaposi’s sarcoma,

Sometimes all that is needed is a reduction or change in

immunosuppressive drugs, but this can take several months to have

an effect. Occasionally additional treatments including surgical

removal, radiotherapy, and chemotherapy may be required.

telephone any of the dermatology department contact

numbers listed on page 37 as you will need to see

a dermatologist.

Please ask for our separate leaﬂet on Kaposi’s sarcoma if you

would like more information.

30

31



Skin cancer prevention

• A tape measure or ruler

• A digital camera to record any skin marks you are not sure about

It is important that you can recognise the early signs of skin cancer so

that the appropriate treatment can be given. The earlier these skin

growths are detected, the better the outcome.

To make sure that you check all your skin, we suggest you examine

yourself from head to toe following these steps. Use a mirror to check

difﬁcult-to-see areas or ask a friend or relative to help you.

Skin self-examination

Head

We recommend you examine your skin regularly, ideally at least once

a month. This means that if you notice any new lumps, bumps, marks

or growths on your skin they can be checked by a dermatologist and,

if necessary, treated early. Early detection can help to reduce the risk

of developing a larger, more serious skin cancer that may need

extensive surgery or treatment.

Beginning with your head, examine your scalp using a comb to part

your hair so you can check all over your scalp. Go on to look over your

face and neck. Don’t forget to check behind your ears and the back of

your neck.

Upper body

You should be looking for:

Check your shoulders, chest and abdomen, again using a comb to

part any hair to examine the skin underneath. Don’t forget to examine

under your breasts and in the groin area.

• New skin lumps, spots, ulcers, scaly patches or moles that weren’t

there before

• Marks (including moles) on the skin that have changed shape,

colour, texture or size

Arms and hands

Examine each arm in turn beginning with the hands. Look at both the

front and back of your hands and check between your ﬁngers (the web

spaces) and your ﬁngernails. Examine all around your upper and lower

arms (remember to use a mirror for places you can’t see) and raise

your arms above your head to check each armpit.

• Sores that do not heal

• Any areas on the skin that are itchy, painful or bleed

How to examine your skin

Ideally you should examine your skin in a warm, well-lit room with the

following equipment:

Back

• A chair

If you have someone who can look at your back for you that is the

easiest method of examination. If you want to do it yourself, use a

full-length mirror in conjunction with a hand-held mirror. Look at the

whole of your back starting at the top. Examine both shoulders to the

middle of your back. Working from each side to the middle, traversing

your back as you go, move down past your hips to your bottom.

• A full-length mirror

• A hand-held mirror

• A comb

32

33



Legs and feet

Example: Red bleeding lump, 16/5/14

Sit down to examine the front and sides of your upper and lower legs.

Remember to look at your groin area including the genitals. Look at

your feet, paying particular attention to the soles and between your

toes. Remember to check your toenails.

Recording what you ﬁnd

You might ﬁnd it helpful to use a non-permanent marker pen to draw

around any skin marks that you notice to see if they get any bigger, or

change in any way. Alternatively you could photograph them.

You can record any skin changes that you are worried about on these

diagrams of the front and back of the body. As shown in the example

here, draw a small circle on the diagram in the approximate position

you found the skin problem. Write down the date that you noticed it,

and any other remarks such as ‘bleeding’ or ‘itchy’. This will help

remind you and assist the dermatologist when they see you at your

next visit.

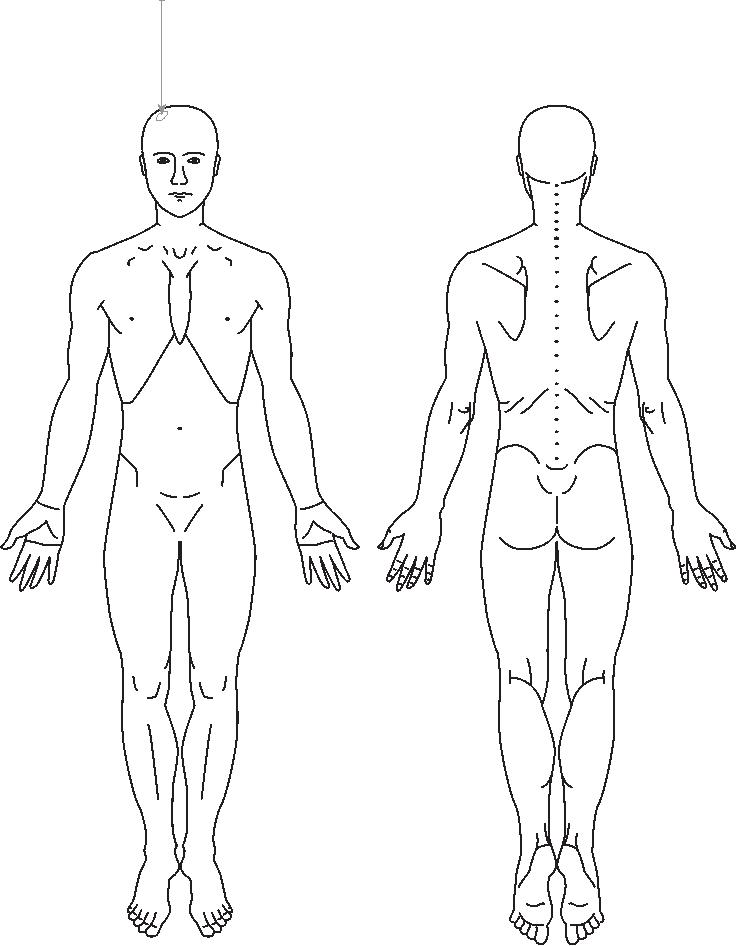
If you notice any new lump, bump, ulcer, sore, scaly patch or changing

mole that lasts for longer than 2–3 weeks, contact your dermatologist

for advice.

34

35



Sun protection

Further information

It is important to protect your skin from excessive sun exposure.

The three golden rules are:

British Association of Dermatologists

(BAD) gives information about skin care to pre-transplant

and transplant patients.

1. Prevent yourself from burning in the sun

2. Avoid sunbathing

www.bad.org.uk

British Society for Skin Care in Immunosuppressed

Individuals (BSSCII) gives information on skin care for

patients and health professionals.

3. Do not use artiﬁcial tanning beds

From April to October you should cover your body as much as

possible by using a hat, long-sleeved clothing and sunglasses. Some

people ﬁnd wearing gloves helpful too.

www.bsscii.org.uk

International Transplant Skin Cancer Collaborative

offers information on skin care and transplant medication.

www.itscc.org

Use a good quality sunscreen, with at least SPF 30–50 and a

4-star rating (this information can be found on the product), on all

sun-exposed areas and stay in the shade. Note that between

11am–3pm the sun is particularly intense.

Cancer Research UK

for free information about cancer and cancer care.

Sunscreens currently available on prescription from your GP are:

Cancer Research UK

PO Box 123

• Sunsense® Ultra

....

(UVB SPF 50+)

• Uvistat®

..........................

(UVB SPF 30 and 50+)

....................

(UVB SPF 50+)

Lincoln’s Inn Fields

London WC2A 3PX

• Anthelios®

Tel: (Supporter Services) 0808 800 4040

www.cancerhelp.org.uk

• Delph®

.............................

(UVB SPF 30+)

Macmillan Cancer Support is a cancer information

and support charity.

Vitamin D

Macmillan Cancer Support

89 Albert Embankment

London SE1 7UQ

People who need to take extra precautions to reduce sun exposure

may become deﬁcient in vitamin D which is important for the healthy

function of the body. Vitamin D is produced in the skin after sun

exposure and is found in foods such as oily ﬁsh. If you think you may

be at risk of vitamin D deﬁciency talk to your GP or transplant doctor.

Tel: (Supporter Services) 0808 808 0000

http://www.macmillan.org.uk/home.aspx

36

37



Patient diary

Please use this diary to keep a record of your clinic visits

Comments

Next appointment

Visit date Outcome (treatment etc)

Write down anything you want to mention

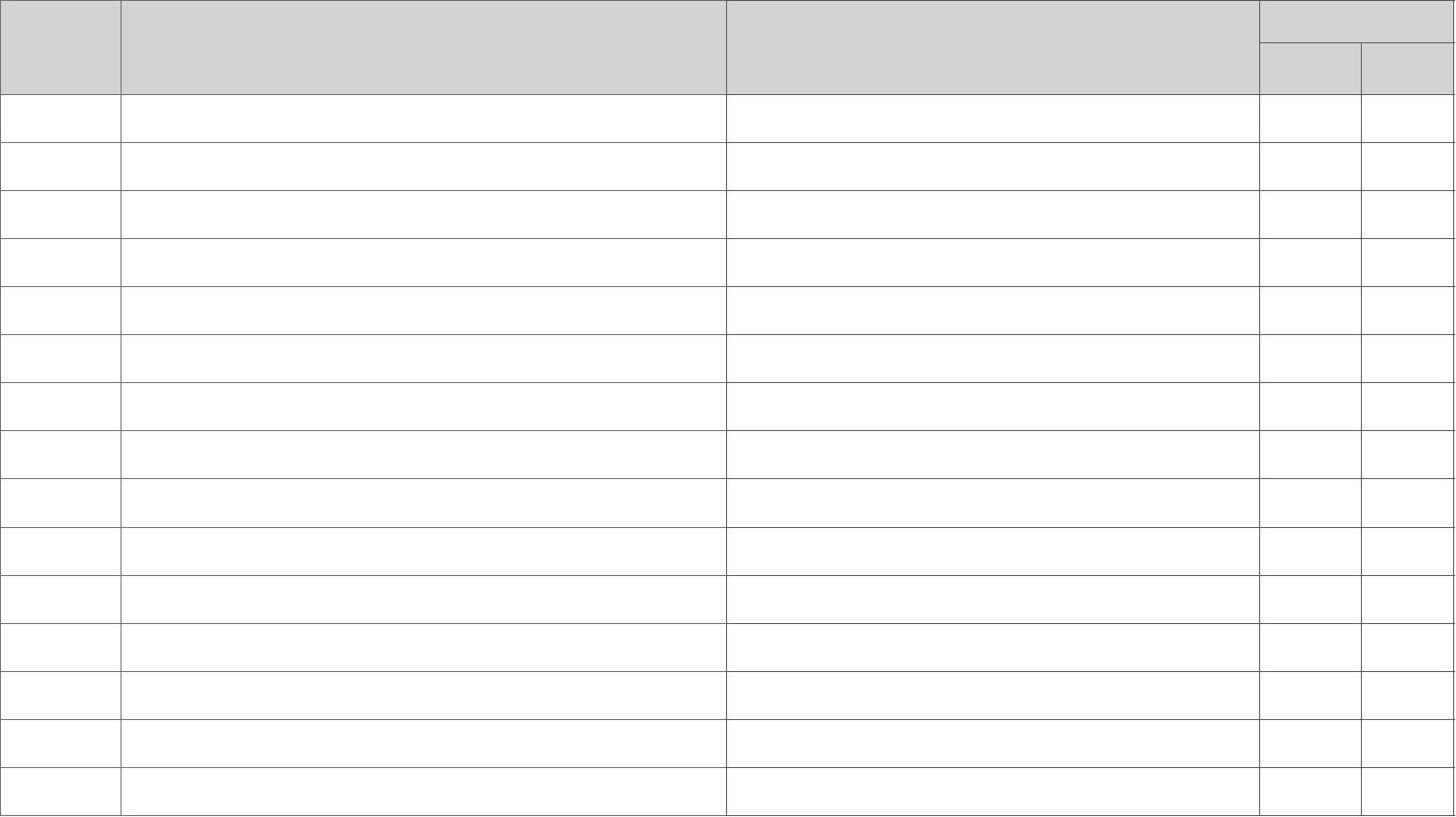
at your next visit

Date

Time

38

39



Comments

Next appointment

Visit date Outcome (treatment etc)

Write down anything you want to mention

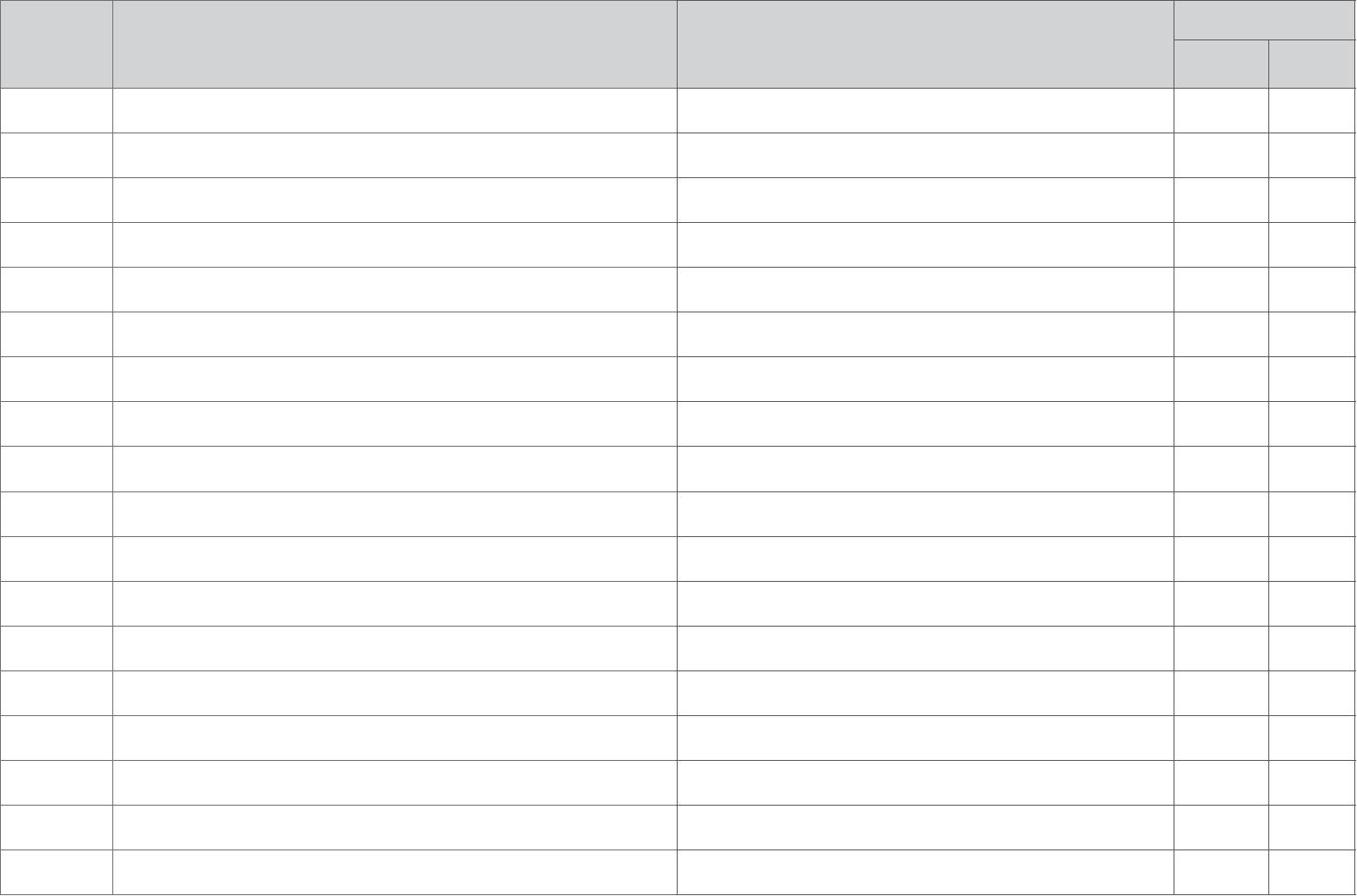
at your next visit

Date

Time

40

41



Comments

Next appointment

Visit date Outcome (treatment etc)

Write down anything you want to mention

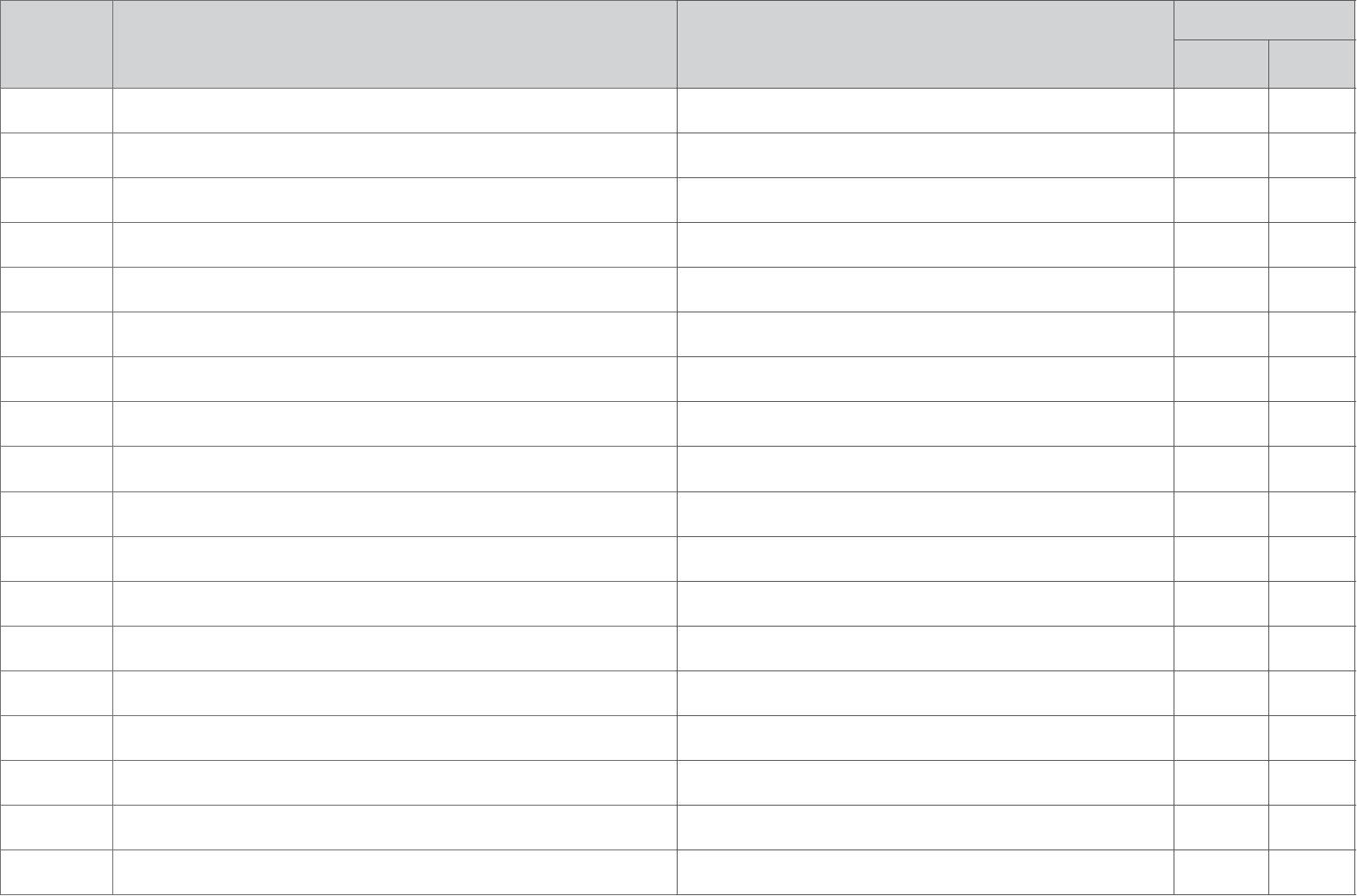
at your next visit

Date

Time

42

43



Please bring this booklet with you

to all clinic visits

©Barts Health NHS Trust

Switchboard: 020 3416 5000

www.bartshealth.nhs.uk

Produced by Medical Illustration

The Royal London Hospital

020 3594 2189

medillustration1@btconnect.com

Publication date: December 2014

