

HUGE DIFFERENCE WORLD CLASS EXPERTISE

A guide to Southfields radiotherapy service
and to making a radiation referral



A GUIDE TO SOUTHFIELDS RADIOTHERAPY SERVICE AND TO MAKING A RADIATION REFERRAL

Southfields Veterinary Specialists is one of the leading centres in the UK for the treatment of cancer in dogs and cats, and one of the few veterinary centres in the UK to have a linear accelerator.

Our radiotherapy facility complements the other cancer treatment modalities that Southfields offers, including chemotherapy and oncologic surgery.

Our linear accelerator (LINAC) is full-time and fully functioning so patients referred to Southfields benefit from treatment using ionizing radiation to accurately target and treat neoplasia and occasionally specific benign diseases.

For more information, please visit southfields.co.uk/radiotherapy

Case discussions

- + Our radiotherapy team encourage referring vets to use our advice-only service with no obligation for onward referral.
- + Online referrals and advice requests can be made via our VetHub portal. You can send your referrals from VetHub and also turn an advice request into a referral at the touch of a button, without the need to re-enter the same information. Please include any appropriate reports such as histopathology/imaging, photographs of the lesion and screenshots of advanced imaging if this has been performed. For some cases we may need to see the full CT/ MRI - we will contact you if this is required.
- + If you prefer you can also call our Client Care Team on **01268 564664** and ask to speak directly to one of our radiation oncologists.



WORLD-CLASS RADIATION CONSULTANTS

Our two world-class radiation consultants have over 20 years' combined experience dealing with radiation cases



Sarah Mason

Head of Service – Lead in General Oncology

BVSc BSc PhD CertAVP(SAM) PGCEd DipECVIM-CA [Oncol] (add Rad Oncol) FHEA MRCVS
RCVS Specialist in Small Animal Oncology
EBVS® European Veterinary Specialist in Small Animal Oncology and Radiation Oncology
RCVS Advanced Practitioner in Small Animal Medicine

Sarah's areas of interest include the optimisation of chemotherapy protocols for small animal lymphoid neoplasia, radiation therapy for the treatment of small animal neoplasia and combined medical and radiation therapy.



James Elliott

Head of Service – Lead in Radiation Oncology

BVM&S CertSAM Dipl. ECVIM-CA (Oncology) DACVR (RO) MRCVS
RCVS Specialist in Veterinary Oncology
EBVS® European Veterinary Specialist in Small Animal Oncology
American Specialist in Veterinary Radiation Oncology

James is experienced in all aspects of modern veterinary radiation, clinical oncology and has achieved high-level skills in treatment planning; particularly intensity-modulated radiation therapy, stereotactic radiosurgery and stereotactic body radiation therapy. James is a member of the Veterinary Cancer Society, the European Society of Veterinary Oncology and is a regular speaker to vets on oncology topics and has published on various subjects in veterinary literature, including blood biomarkers in certain cancers, chemotherapy for canine lymphoma and canine oral mast cell tumours. James was awarded the 2019 ACVR resident prize for his research into radiation therapy for plasma cell tumours.

James and Sarah lead our Oncology and Radiation Oncology teams comprising clinicians in oncology, residents, interns and oncology nurses, plus a radiotherapy technician and two therapeutic radiographers.

WHY CHOOSE SOUTHFIELDS FOR RADIOTHERAPY?

World-class expertise



Southfields radiotherapy service is provided by veterinary specialists with the highest level of expertise, recognised by the Royal College of Veterinary Surgeons and European/ American Colleges.



Treatment plans are unique to each patient. Clients can therefore be assured that we will provide the highest standards of care and treatment, which offer the best possible outcome for their pet.



At Southfields, our radiotherapy team work closely with our imaging specialists who run Southfields sophisticated imaging facilities, together with expert anaesthesia and analgesia clinicians and 24-hour veterinary nursing staff, all of whom are dedicated to providing our patients with the very best treatment and care.

Services

- + Multi-disciplinary referral service
- + Radiotherapy and advanced treatment options for oncology cases
- + Free telephone advice given with the minimum of delay
- + Daily emergency and urgent appointments available
- + Urgent cases are seen the same day, wherever possible
- + Outstanding clinical care, 24/7, 365 days a year
- + 24-hour intensive care service
- + Rapid feedback on diagnosis and treatment

WHAT HAPPENS WHEN A PATIENT IS REFERRED?

Initial assessment

Patients referred to Southfields will receive an initial assessment, which is particularly important in cases involving tumours of the head and neck, such as nasal cavity tumours, brain tumours, some complex oral tumours or unusual thyroid tumours.

- + We will discuss the planned treatment options and possible protocols with the owner.
- + The protocols are flexible where appropriate and we will plan these based on a combination of factors, including tumour type and location, patient co-morbidities, age and temperament of patient, client factors, such as ability to travel or board the patient, and likely prognosis.
- + A careful risk assessment will be made of radiotherapy toxicity compared with the likely benefit of the planned protocol.
- + A planning CT is normally performed at the time of the first appointment.
- + If required a head/ neck mould may be created at the same time to allow accurate patient placement, beam alignment and to immobilise the head during therapy.

Progression of treatment

- + Protocols range from palliative once weekly to definitive five times weekly for four weeks.
- + Each treatment, known as a 'fraction', is given under a very short general anaesthetic.
- + Dogs and cats can be boarded in the hospital for as long as necessary, as our wards are staffed 24/7 by qualified vets and nurses.



RADIOTHERAPY TREATMENT OPTIONS

At Southfields, we offer three types of treatment;

1 **Definitive Treatment** (also known as curative-intent treatment)

This is usually the protocol of choice for most localised cancers with a good prognosis as it gives the best chance of long-term tumour control by providing the biggest total dose to the tumour.

Each treatment, known as a 'fraction', is normally provided at Southfields from Monday to Friday for two to four consecutive weeks, amounting to 10 - 20 fractions.

The required radiation dose is not given as one single treatment because the normal tissue surrounding the tumour is unable to tolerate this.

Radiotherapy treatment requires careful planning from CT scans to determine the position and extent of the tumour within the body and its relative position to healthy structures. Very small changes in position can have profound effects on the distribution of the radiation dose delivered.

We pay great attention to detail to ensure patients are treated in precisely the same position as they were in for the CT scan, using a special positioning device and an imaging system integrated with the linear accelerator.

We are then able to target the dose to the tumour whilst avoiding the surrounding important structures such as the brain, eyes, ears, inside the mouth and thoracic/

abdominal organs. However, it is inevitable that there will be some dose to these areas, as a margin has to be added to target microscopic tumour cells away from the main tumour and allow for subtle patient or organ motion (including breathing) during treatment.

In some cases, further scans/special computerised planning is not required, particularly for the treatment of simple post-operative scars (limbs).

There are two main reasons why multiple small fractions are given, rather than a small number of high dose treatments:

- + To build up to a high total dose
- + To minimise the risks of late-onset radiation side effects in normal tissues near to the tumour, e.g. fibrosis, necrosis, vascular damage and carcinogenesis

Therefore, a greater total dose can be administered to improve the probability of controlling the tumour for longer.

We consider every patient unique and we will always discuss the objectives of the owner and define the protocol options for the patient's best interest.

If an intensive course is not selected for medical and/or logistical reasons, our team will discuss alternative protocols, where possible and appropriate.



2

Palliative Treatment

In cases when the tumour is too advanced to be controlled by radiation, palliative therapy using lower total doses and fewer fractions of radiation may be used to retard the tumour's growth or reduce associated pain.

At Southfields, palliative treatment is normally provided once per week for 4-6 weeks, or over 5 consecutive days. However, there are a variety of protocols that can be used, depending on the clients, finances and the tumour site and/or prognosis.

Because palliative treatment involves fewer radiation fractions, the total cost of treatment is generally not as high as with definitive treatment, and the total dose is lower, so there are fewer acute side effects. e.g. sore skin/gums etc.

However, because the dose is lower, there is less chance of controlling the cancer and there is also a higher risk of late side effects.

3

Lower-dose radiation therapy (LDRT) for osteoarthritis (OA)

Lower-dose radiation therapy is a treatment to control chronic unresponsive pain in the long term.

This treatment is now available at Southfields for dogs who have previously been treated with medical therapy for lameness caused by OA of one or multiple joints, but who

continue to suffer with chronic unresponsive pain. The primary purpose of the treatment is for long-term pain management, as the LDRT will reduce the swelling and pain associated with the OA for approximately three to six months between treatments.



Radiotherapy is typically used:

- + after surgery, when all the visible cancer has been removed but microscopic cancer has been left behind at the surgical site (margins) and there is a risk of tumour re-growth, e.g. mast cell tumours and soft tissue sarcomas
- + for treatment of naturally radiosensitive tumours without surgical removal (surgery declined by the owner, tumour inoperable, or surgery contra-indicated) - this category includes nasal tumours, brain tumours, thyroid tumours, some oral tumours and anal sac tumours
- + for palliation/slowing down the growth of many solid tumours that are not surgically removable, or where surgery would carry a significant risk to the patient
- + for pain relief in cats and dogs with primary bone tumours (e.g. osteosarcoma) or tumours that have metastasised (spread to) areas of bone.



In specific cases, our team also offer radiation therapy for the palliation of osteoarthritis.

We can also treat other conditions, such as chronic rhinitis in cats/dogs or granulomatous meningoencephalitis (GME).



Appointments

We can generally offer appointments within a few days for assessment and planning and aim to start radiation treatment within 14 days, after referral, depending on the complexity of the case. This time can be variable, depending on the complexity of the case and treatment planning process.

HOW TO REFER

Making a referral to Southfields is straightforward and you can choose how you wish to refer. Our online VetHub advice and referral system is the easiest route to referral.

Online



Go to:
www.vethub.southfields.co.uk/signin

Complete information and upload relevant clinical history, test results and radiographs

- + Please supply all relevant clinical history including: for adjunctive treatments: photographs and measurements of the tumour in situ prior to surgery, date of surgery and final histopathology report
- + imaging studies as DICOM files (not JPEGs)
- + results of any staging performed including biopsy report for gross tumours
- + letter /history detailing patient co-morbidities, current medications and any owner related constraints
- + primary veterinarian contact details (name, practice, address, email and telephone number)

If you choose to email info@southfields.co.uk please include the above details in a single email.

Other ways you can refer



Email

Our Client Care team at
info@southfields.co.uk



Telephone

Call our Client Care team on
01268 564664



Post

Any documents that can not be sent electronically can be posted to:

Southfields Veterinary Specialists
Cranes Point, Gardiners Lane South,
Basildon, Essex, SS14 3AP



Follow us



For more information, get in touch

T 01268 564664

E info@southfields.co.uk

southfields.co.uk

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