Talc Pleurodesis: Doctor versus Nurse

Led Procedure.

A prospective, randomised, non-inferiority, multi-centre pilot study.

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Talc Pleurodesis

Instillation of either talc slurry through an intercostal pleural drain or talc insufflation as a powder at thoracoscopy or thoracotomy to create an inflammatory reaction

Background

- Procedure is traditionally undertaken by physicians
- Inconsistencies with the procedure
- This can effect the sucess of the procedure (Tan et al. 2006 EJCTS)

Appropriately trained nurses could competently perform this procedure as safely and effectively as doctors

.....practice must be supported by evidence .....not simply being trained by a doctor

Methods

- Pilot study to assess feasibility
- Pragmatic sample size (n=40)
- Approved by REC
- Four centres
- 24 patients randomised to doctor or nurse for their procedure between Feb 06 – Feb 07
- Stratified according to ECOG performance status

Primary Outcome

Patient satisfaction measured by questionnaire

The null hypothesis is that there is no difference in patient satisfaction when the procedure is performed by doctors or nurses

Secondary Outcomes

- Complications
- Pain and anxiety levels
- Recurrence of effusion at 1 month
- Impact of the procedure on workload and professional development

Patient Questionnaire

17 items covering pre, peri and post procedural care using Likert scale were analysed using the Fisher exact test

Qualitative data elicited from open ended questions

Staff Questionnaire

10 items to determine -

- Level of experience
- Information given to patients
- Impact on workload

Assessment of Competence

Direct Observation of Procedural Skills (DOPS)

NHS Modernising Medical Careers

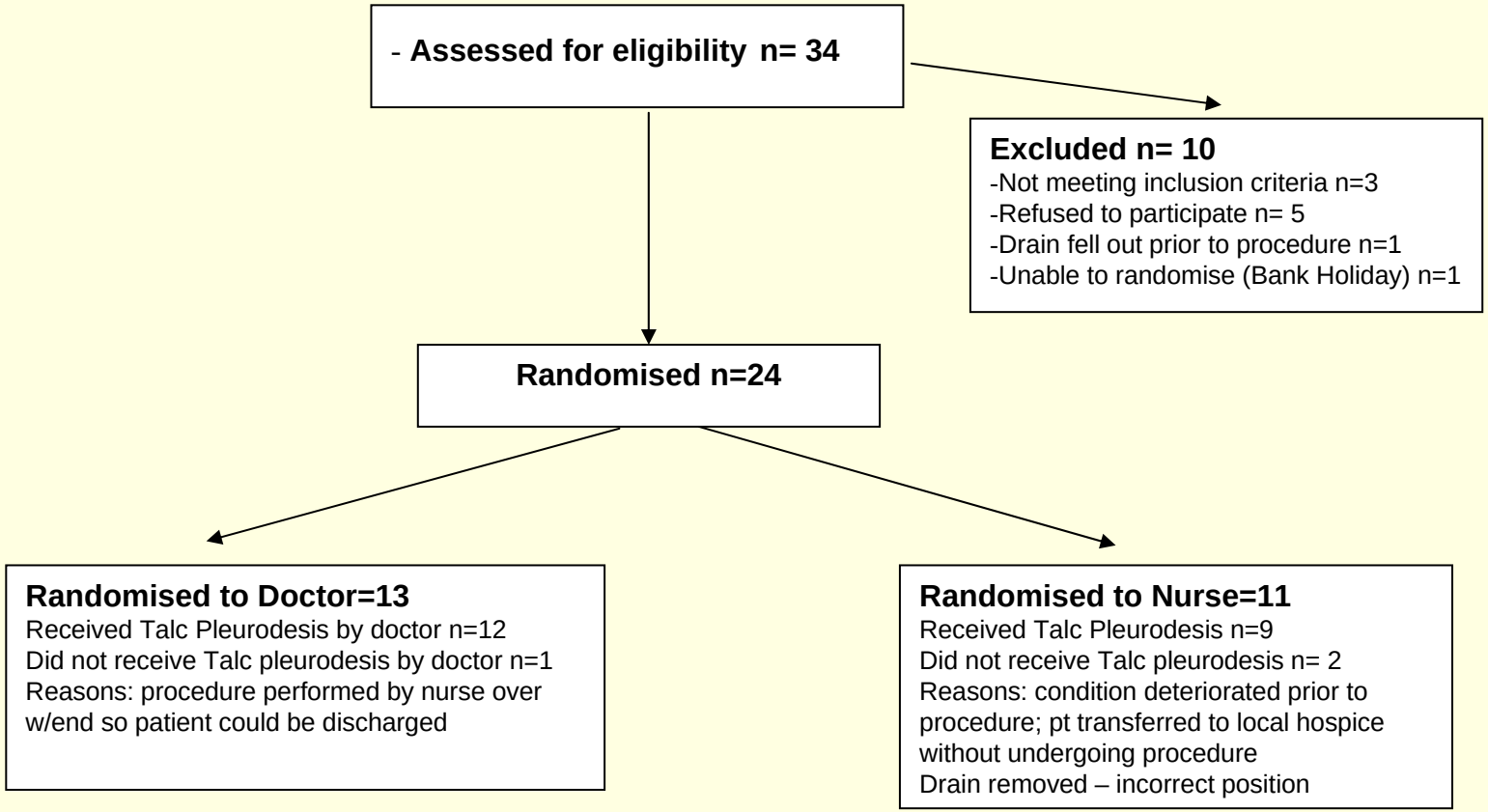
Inclusion Criteria

- Over 18 years of age
- Pleural effusion requiring talc pleurodesis
- Given written informed consent

Exclusion Criteria

- Patients participating in MesoVATS study
- Indication for talc pleurodesis due to pneumothorax

Consort Diagram



Results

20 patients were included in the interim analysis (11 male, 9 female)

Malignant pleural effusion due to:

- Adenocarcinoma
- Mesothelioma
- Breast Cancer

Results

- Patients in both groups were satisfied with the care from the person performing the procedure
- There was no significant difference in pain or anxiety assessments
- Recurrence of effusion occurred in two patients

Results

“Done at the most appropriate time”

“Done correctly”

“The pain got almost unbearable”

“Pain was much worse than expected”

Results

- One patient required prolonged hospitalisation (not related to procedure)

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- Staff had >6months experience in thoracic medicine
- No significant impact on workload
- Effective training and assessment as evidenced by no complications related to the procedure
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Conclusion

- Nurses are as safe and effective as doctors in performing this procedure
- Patients are as equally satisfied with nurses as they are with doctors
- Awareness of the procedure has increased since the study started

Conclusion

Small sample ..... but the data suggest that this is a procedure which can be competently and safely undertaken by approriately trained nurses

Study is ongoing until 40 patients are enrolled

Benefits and Future considerations

- Evidence-based protocol for the procedure
- Produced a Patient Information Leaflet
- Explore validation of the questionnaire
- Apply similar process to other procedures as roles devlop

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