रस शास्त्र – 01

अन्तर्धूम व बहिर्धूम ताम्र सिन्दूर कल्पना एवं अपस्मार रोग पर प्रभावात्मक अध्ययन

अध्येत्री : डा. प्रतिभा भटनागर

निर्देशक : वैद्य रामावतार शास्त्री

सह–निर्देशक : डा. संतोष कुमार मिश्रा

वर्ष : 1992

ताम्र सिन्दूर का अन्तर्धूम एवं बहिर्धूम विधि से निर्माणात्मक अध्ययन एवं अपस्मार रोग में उसका प्रभावात्मक अध्ययन करना महानिबन्ध का उद्‌देश्य है।

इस शोध कार्य में अन्तर्धूम एवं बहिर्धूम दोनों विधियों से ताम्र सिन्दूर (रसायनसार, प्रथम भाग, धातुशोधनमारण प्रकरण/84–93, 94–99) का निर्माण किया गया । अन्तर्धूम ताम्र सिन्दूर के पाँच तथा बहिर्धूम ताम्र सिन्दूर के चार बैच तैयार किए गए । बाद में गलस्थ यौगिक से द्विगुण तलस्थ ताम्र भस्म को मिलाकर रोगियों पर प्रयोग किया गया ।

चयनित 18 रोगियों को दो वर्गों में विभाजित किया गया । प्रथम वर्ग में ताम्र सिन्दूर को एक से दो रत्ती, दिन में दो बार मधु के अनुपान के साथ दिया गया तथा द्वितीय वर्ग में ताम्र सिन्दूर को मेध्य सीरप के अनुपान के साथ दिया गया ।

प्रयोग अवधि 2 से 4 माह तक (रोगी के दौरों के अन्तराल के आधार पर) रखी गई ।

दोनों वर्गों में रोगियों को ताम्र सिन्दूर के सेवन से लाभ प्राप्त हुआ । प्रथम वर्ग के रोगियों में द्वितीय वर्ग के रोगियों से अधिक लाभ हुआ तथा दौरों का अन्तराल 22 दिन तक बढ़ गया ।

रस शास्त्र – 02

शिरिषारिष्ट का भैषज्यकल्पनात्मक अध्ययन एवं हिस्टेमीन प्रतिरोधात्मक प्रायोगिक अध्ययन – शीतपित्त के परिप्रेक्ष्य में

अध्येता : डा. मोना पी. चौरसिया
निर्देशक : वैद्य रामावतार शास्त्री
सह–निर्देशक : डा. प्रेम लौरिया
वर्ष : 1992

शिरिषारिष्ट और उसके घटक द्रव्यों का हिस्टेमीन प्रतिरोधात्मक प्रायोगिक परीक्षण करना महानिबन्ध का उद्देश्य है ।

इस अध्ययन के लिए निम्न 12 वर्ग बनाए गए एवं प्रयोग हेतु गिनीपिग को चुना गया, प्रत्येक वर्ग में 6 गिनिपिग लिए गए ।

1. हिस्टेमीन वर्ग ।
2. शिरीषारिष्ट ट्री टेड वर्ग [10 घटक द्रव्यों (शिरीष, पिप्पली, प्रियंगु, एला, कूठ, नील, नागकेशर, हल्दी, दारुहल्दी, सोंठ) के प्रत्येक के वर्ग] ।
3. स्टेण्डर्ड वर्ग (एण्टीहिस्टेमीन – डायफेनहाइड्रामीन) ।

आतुरीय परीक्षण हेतु चयनित 30 आतुरों को 15–15 आतुरों के दो वर्गों – वर्ग 'अ', वर्ग 'ब' में विभक्त किया ।

(1) वर्ग 'अ' – शिरीषारिष्ट (भैषज्यरत्नावली, विषरोगचिकित्सा/71–73) 15–30 मि. लि. दिन में दो बार समभाग जल से, भोजनोत्तर ।

(2) वर्ग 'ब' – टरफेड (टरफेनाडिन) 60 मि.ग्रा. दिन में दो बार जल से।

30 दिन पश्चात् आतुरों का परीक्षण औषध का प्रभाव एवं उपद्रवों आदि के ज्ञान हेतु किया गया । कुल 22 आतुरों ने इस परीक्षण में भाग लिया ।

कुल प्रभाव की दृष्टि से शिरीषारिष्ट 64.5 प्रतिशत एवं टरफेड 58.2 प्रतिशत लाभप्रद रही है । अतः शिरीषारिष्ट एण्टीहिस्टेमीनिक ड्रग टरफेड के समान ही लाभकारी है । यद्यपि शिरीषारिष्ट का प्रभाव देर से प्रारम्भ होता है, तथापि आमाशय सम्बन्धी एवं केन्द्रिय सुषुम्ना केंद्र सम्बन्धी दुष्परिणाम तथा उपद्रवों की अनुपस्थिति पाई जाती है जो कि टरफेड लेने के पश्चात् प्रायः देखी जाती है ।

रस शास्त्र – 03

अपामार्ग क्षार एवं अपामार्ग की कतिपय कल्पनाओं का निर्माणात्मक एवं प्रभावात्मक अध्ययन (तमक श्वास के परिप्रेक्ष्य में)

अध्येता : डा. विजय पाल त्यागी

निर्देशक : वैद्य रामावतार शास्त्री

सह–निर्देशक : डा. संतोष कुमार मिश्रा

वर्ष : 1992

अपामार्ग क्षार तथा अपामार्ग की विविध कल्पनाओं का निर्माणात्मक अध्ययन एवं उनका तमक श्वास के रोगियों पर तुलनात्मक प्रभाव का अध्ययन करना महानिबन्ध का उद्देश्य है ।

इस शोध कार्य में 50 आतुरों को पांच वर्गों में विभाजित किया गया तथा प्रत्येक वर्ग में तमक श्वास के 10 आतुरों को औषध सेवन कराई गई । चयनित आतुरों में औषध सेवन अवधि 28 दिन रखी । चयनित आतुरों में औषध प्रयोग निम्नांकित प्रकार से कराया गया –

क्र.सं.	वर्ग	प्रयुक्त औषध प्रकार	मात्रा		अनुपान/सहपान
1.	क	अपामार्ग क्षार	250 मि.ग्रा.	तीन बार	मधु
2.	ख	अपामार्ग चूर्ण	3 ग्राम	तीन बार	उष्णोदक
3.	ग	अपामार्ग शार्कर	20 मि.लि.	तीन बार	उष्णोदक
4.	घ	अपामार्ग क्षार एवं	250 मि.ग्रा.	तीन बार	मधु
		अपामार्ग अरिष्ट (कल्पित)	20 मि.लि.	दो बार	समभाग जल
5.	च	अपामार्ग चूर्ण एवं	3 ग्राम	तीन बार	उष्णोदक
		अपामार्ग अरिष्ट (कल्पित)	20 मि.लि.	दो बार	समभाग जल

अपामार्ग क्षार का तमक श्वास के लक्षणोपशमन में औसत प्रभाव 51.93%, अपामार्ग चूर्ण का 66.23%, अपामार्ग शार्कर का 49.53%, अपामार्ग क्षार एवं अपामार्ग अरिष्ट मिश्रित योग का 74.15% तथा अपामार्ग चूर्ण एवं अपामार्ग अरिष्ट मिश्रित योग का 75.51% रहा । अतः तमक श्वास व्याधि पर सर्वाधिक औसत प्रभाव अपामार्ग चूर्ण एवं अपामार्ग अरिष्ट मिश्रित योग (वर्ग च) का रहा ।

रस शास्त्र – 04

निम्बादि चूर्ण का कल्पना भेद से विचर्चिका रोग पर अध्ययन

अध्येता : डा. राम गोपाल पारीक

निर्देशक : वैद्य रामावतार शास्त्री

वर्ष : 1992

निम्बादि चूर्ण का कल्पना भेद से निम्बादि वटी एवं निम्बादि घनवटी का निर्माणात्मक अध्ययन तथा विचर्चिका रोग पर प्रभावात्मक अध्ययन करना महानिबन्ध का उद्देश्य है ।

रसायनशाला से निम्बादि वटी एवं निम्बादि घनवटी के घटक द्रव्यों (नीम पंचाग, त्रिफला, त्रिकटु, ब्राह्मी, गोक्षुर, भिलावा, चित्रक, विडंग, वाराहीकंद, लौह भस्म, गिलोय, हरिद्राद्वय, बावची, अमलतास, कूठ, इन्द्रयव, पाठा, असन, चक्रमर्द, खदिर, भृंगराज तथा विजयसार) को प्राप्त करके दोनों कल्पों को बनाया गया । निम्बादि वटी के लिए Granule बनाकर 500 मि.ग्रा. की वटी बनाई गई । निम्बादि घनवटी की 500 मि.ग्रा. की वटी बनाई गई ।

चिकित्सार्थ 30 विचर्चिका के रोगियों को दो वर्गों में विभक्त किया गया । स्नेहन, विरेचन कराने के उपरान्त वर्ग 'अ' में निम्बादि वटी 3–5 ग्राम और वर्ग 'ब' में निम्बादि घनवटी 1–3 ग्राम उष्णजल के साथ, 2 माह तक दी गई ।

निम्बादि वटी की पिडका, स्राव, दाह, रुजा, त्वक् रुक्षता पर उत्तम कार्मुकता देखी गई । निम्बादि घनवटी की रुजा, दाह, त्वक् रौक्ष्य पर उत्तम कार्मुकता रही।

निम्बादि वटी से 8 रोगियों पर उत्तम लाभ, 4 रोगियों में मध्यम, 2 रोगियों में अल्प लाभ एवं एक रोगी में अलाभ रहा । निम्बादि घनवटी से 4 रोगियों में उत्तम लाभ, 6 रोगियों में मध्यम, 2 रोगियों में अल्प एवं 3 रोगियों को अलाभ रहा ।

रस शास्त्र – 05

शिवा गुटिका का निर्माण एवं मधुमेह रोग के परिप्रेक्ष्य में अध्ययन

अध्येता : डा. राजेन्द्र कुमार भारद्वाज

निर्देशक : वैद्य रामावतार शास्त्री

सह–निर्देशक : डा. संतोष कुमार मिश्रा

वर्ष : 1992

शिवा गुटिका का निर्माणात्मक अध्ययन कर उसका मधुमेह के रोगियों पर प्रभावात्मक अध्ययन करना महानिबन्ध का उद्देश्य है ।

शिवा गुटिका (अष्टांगसंग्रह, उत्तरस्थान 49/309–325) की लगभग 500–500 मि.ग्रा. की वटी का हाथ से निर्माण किया गया ।

आर्द्र शिवा गुटिका का कुल मान : 4.375 कि.ग्रा.

शुष्क होने के पश्चात् प्राप्त मान : 4.000 कि.ग्रा.

मान में क्षति : 375 ग्राम

आतुरीय चिकित्साक्रम में 20 आतुरों का चयन किया गया । प्रति आतुर 3 ग्राम शिवा गुटिका विभाजित मात्रा में दी गई । 2–2 वटी की मात्रा में तीन बार क्रमशः प्रातः, मध्यान्ह एवं सायंकाल उष्णोदक से सेवन कराया गया । चिकित्सा अवधि 60 दिन रही, जिसमें मूत्रगत शर्करा का मापन चार बार (प्रारम्भ में, 20 दिन पश्चात्, 40 दिन पश्चात् एवं 60 दिन पश्चात्) कराया गया ।

चिकित्सोपरान्त 20 रोगियों में से 9 रोगियों में रक्तगत शर्करा में पूर्ण लाभ पाया गया। 4 रोगियों में सामान्य लाभ पाया गया, इन रोगियों में रक्तशर्करा की मात्रा कम तो हुई, किन्तु सामान्य स्तर तक नहीं पहुँची, 7 रोगियों में 20 प्रतिशत लाभ ही पाया गया ।

चिकित्सा के पश्चात् कुल लाभ का प्रतिशत 69.22 रहा ।

रस शास्त्र – 06

रजत सिन्दूर का निर्माण एवं प्रभावात्मक अध्ययन (गृध्रसी एवं विश्वाची रोग के परिप्रेक्ष्य में)

अध्येता : डा. अतुल कुमार जैन

निर्देशक : डा. एल.एन. शर्मा

सह–निर्देशक : डा. संतोष कुमार मिश्रा

वर्ष : 1996

रजत सिन्दूर का निर्माणात्मक अध्ययन एवं रजत सिन्दूर का विश्वाची एवं गृध्रसी रोग पर प्रभावात्मक अध्ययन करना महानिबन्ध का उद्देश्य है ।

प्रायोगिक दृष्टि से दो अलग–अलग रोगों पर योग का प्रयोग तीन प्रकार से किया गया। रजत सिन्दूर (आयुर्वेदसारसंग्रह, पृ. 223), रजतभस्म (रसतंत्रसार व सिद्धप्रयोगसंग्रह, प्रथम खण्ड, पृ. 92) तथा रजत सिन्दूर + रजतभस्म इन तीनों योगों को पृथक्–पृथक् (1–1 रत्ती मात्रा में) लेकर लौह भस्म, स्वर्णमाक्षिक भस्म तथा रससिन्दूर 60–60 मि.ग्रा. की मात्रा में एवं चित्रक व अजवायन क्वाथ 10–10 मि.लि. की मात्रा के साथ दिन में 2 बार, इन दोनों रोगों में एक माह की अवधि तक दिया गया । प्रत्येक रोग के तीन वर्ग बनाकर, कुल 6 वर्गों में इन तीनों योगों का प्रयोग किया गया । प्रत्येक वर्ग में 5 आतुर थे ।

गृध्रसी सम्बन्धी लाभ			**विश्वाची सम्बन्धी लाभ**		
रजत सिन्दूर	:	54.35%	रजत सिन्दूर	:	56.55%
रजतभस्म	:	43.33%	रजतभस्म	:	46.93%
रजत सिन्दूर + रजतभस्म	:	48.83%	रजत सिन्दूर + रजतभस्म	:	49.06%

अतः दोनों ही रोगों में रजत सिन्दूर से रोगियों को अधिक लाभ हुआ, रजत सिन्दूर + रजत भस्म वाले योग से मध्यम लाभ हुआ तथा रजत भस्म के योग से अल्प लाभ हुआ ।

रस शास्त्र – 07

श्वासान्तक रस का निर्माणात्मक एवं तमक श्वास और जीर्ण कास पर प्रभावात्मक अध्ययन

अध्येता : डा. देवी नारायण सेठी

निर्देशक : डा. लोक नाथ शर्मा

सह–निर्देशक : डा. संतोष कुमार मिश्रा

वर्ष : 1996

श्वासान्तक रस का निर्माणात्मक अध्ययन तथा तमक श्वास और जीर्ण कास पर प्रभावात्मक अध्ययन करना महानिबन्ध का उद्देश्य है ।

श्वासान्तक रस (रसरत्नसमुच्चय, श्वासचिकित्सा/50–51) का तमक श्वास एवं जीर्ण कास पर प्रभावात्मक अध्ययन के लिए 40 रोगियों का चयन कर उन्हें 2 वर्गों में विभक्त किया गया । प्रत्येक रोगी को 2 रत्ती (250 मि.ग्रा.) की मात्रा में अहोरात्र में दो बार कोष्ण जल अनुपान के साथ 6 सप्ताह तक औषधि दी गई।

चयनित कुल 40 आतुरों में से 14 आतुरों (35 प्रतिशत) को उत्तम लाभ रहा। मध्यम लाभ वाले आतुरों की संख्या 17 (42.5 प्रतिशत) रही तथा हीन लाभ वाले आतुरों की संख्या 9 (22.5 प्रतिशत) रही ।

श्वासान्तक रस की तमक श्वास पर कार्मुकता 71.7 प्रतिशत पाई गई, जिसे उत्तम लाभ कहा जा सकता है एवं जीर्ण कास पर 62 प्रतिशत या मध्यम लाभ पाया गया ।

श्वासान्तक रस की तमक श्वास एवं जीर्ण कास पर संयुक्त रूप में कार्मुकता 61.6 प्रतिशत रही । अतः श्वासान्तक रस का तमक श्वास पर उत्तम लाभ एवं जीर्ण कास पर मध्यम लाभ रहा ।

रस शास्त्र – 08

षड्बिन्दु तैल का निर्माणात्मक एवं विचर्चिका पर प्रभावात्मक अध्ययन

अध्येता : डा. हनुमान प्रसाद जोशी

निर्देशक : डा. एल.एन. शर्मा

सह–निर्देशक : डा. संतोष कुमार मिश्रा

वर्ष : 1996

षड्बिन्दु तैल का निर्माणात्मक अध्ययन एवं विचर्चिका के रोगियों पर प्रभावात्मक अध्ययन करना महानिबन्ध का उद्देश्य है ।

षड्बिन्दु तैल (भै.र. 54/290–291) का निर्माण पांच दिनों में तैल पाक कल्पना से किया गया । अध्ययन के लिए 25 विचर्चिका रोगियों का चयन Eosinophils वृद्धि को मुख्य रोग निदान का आधार मान कर किया गया । औषध का रोगवृद्धि के अनुसार लगभग 5–10 मि.लि. मात्रा में दिन में 2 बार एक माह तक बाह्य प्रयोग किया गया ।

चिकित्सा के बाद विविध लक्षणों में औषध का प्रभाव इस प्रकार रहा – कण्डु में 37.5 प्रतिशत, रुजा में 57.89%, रुक्षता में 42.85%, दाह में 60%, पिडका में 50%, स्राव में 43.75%, श्याववर्ण में 54.83%, ESR में 23.72% प्रतिशत तक की कमी तथा Eosinophil में 37.07% की कमी हुई। इस प्रकार षड्बिन्दु तैल की विचर्चिका पर कार्मुकता 48.19 प्रतिशत पाई गई।

Rasa Shastra - 09

Phytochemical studies of certain indigenous drugs

Scholar	:	Dr. Ajit Kumar Ghosh
Guide	:	Prof. Loknath Sharma
Co-Guide	:	Dr. Santosh Kumar Mishra
		Sh. Yashwant Kothari
Year	:	1998

The objectives of this study were to evaluate definite procedure for identification, standardization & chemical composition of plant material.

This work consists with following drug standardization :

1. Bola (commiphora myrrha)
2. Nilavembu (Andrographis paniculata)
3. Kadugu (Brassica juncea)
4. Agasthi (Sesbania grandiflora)
5. Thuvari (Cajanus cajan)

The above 5 samples were collected from CCRAS & considered as genuine. Drug studies were conducted as per the parameters in the ayurvedic pharmacopia of India Vol. I, Part I 1989.

3 samples of each drug collected.

Following standards/parameters were determined for the above collected drugs & results are as follows :

Tests	Bola(%)	Nilavembu(%)	Kadugu(%)	Agasthi(%)	Thuvari(%)
Moisture content	09-10.7	8.10-10.30	8.6-9	6.1-6.9	7-8.9
Total ash	5.3-8.6	10.1-11.4	6-6.1	10.5-14	3.9-4.9
Acid insoluble ash	0.3-1	0.4-1.5	0.23-1.6	1.06-1.84	0.06-0.26
Water soluble ash	0.8-1.36	2.7-3.3	1.2-2.2	2.1-2.4	2.6-3.9
Alcohol soluble ash	13.4-17.5	5.6-10.2	6.4-12	13.5-14.9	3.7-7.12
Water soluble extracts	74.4-77.5	12.4-16.6	14-29	20.0-37	7.04-11.5
Ether soluble extracts	2.5-4.9	1-1.2	18-20.6	2.2-3.2	1.5-2.4
Volatile oil	3.25-5.5	-	-	-	-
TLC	0.9	0.71	0.79	0.86	-

रस शास्त्र – 10

स्वर्णमाक्षिक भस्म का निर्माणात्मक एवं प्रभावात्मक अध्ययन (पाण्डुरोग के परिप्रेक्ष्य में)

अध्येता : डा. बनीराम मीणा

निर्देशक : प्रो. एल.एन. शर्मा

सह–निर्देशक : डा. संतोष कुमार मिश्रा

वर्ष : 1998

स्वर्णमाक्षिक भस्म का निर्माणात्मक अध्ययन एवं स्वर्णमाक्षिक भस्म (रसरत्नसमुच्चय 2/84) का पाण्डुरोग पर प्रभावात्मक अध्ययन करना महानिबन्ध का उद्देश्य है ।

अशुद्ध स्वर्णमाक्षिक एक कि.ग्रा. लेकर उसका शास्त्रोक्त विधि से निम्बुस्वरस से शोधन किया गया । शोधन पश्चात् स्वर्णमाक्षिक चूर्ण का वजन 950 ग्राम था। 950 ग्राम शु. स्वर्णमाक्षिक में समभाग शु. गंधक मिलाकर निम्बुस्वरस की भावना देकर, टिकिया बनाकर 7 पुट दिए गए । मारणोपरान्त औषध प्रयोग हेतु कुल प्राप्त भस्म की मात्रा 825 ग्राम रही ।

संस्थान के बहिरंग विभाग से 25 आतुरों का चयन पाण्डुरोग के शास्त्रोक्त लक्षणों के आधार पर किया गया तथा रोगियों पर 40 दिन तक औषध का प्रयोग 250 मि.ग्रा. मात्रा में दिन में दो बार त्रिफला के साथ किया गया ।

चयनित 25 आतुरों के लक्षणों में लाभालाभ की श्रेणी निम्न प्रकार रही –

उत्तम लाभ – 2.78 प्रतिशत

मध्यम लाभ – 58.33 प्रतिशत

अल्प लाभ – 27.78 प्रतिशत

अलाभ – 13.11 प्रतिशत

इस प्रकार उपरोक्त परिणामों का अध्ययन करने पर ज्ञात होता है कि औषध सेवन उपरान्त आतुरों में 4 प्रतिशत उत्तम लाभ तथा 48 प्रतिशत मध्यम लाभ रहा ।

Rasa Shastra - 11

Pharmaceutico - clinical study of Swarna Vanga w.s.r. to Vajeekaran effect

Scholar : Dr. Rajendra Prasad Sharma

Guide : Dr. Santosh Kumar Mishra

Co-Guide : Dr. Pradeep Kumar Prajapati

Year : 1999

The objectives of this study were standardization of pharmaceutical preparation of Swarna vanga and evaluation of Vajeekarana effect of Swarna vanga.

In pharmaceutical study 3 different samples were made with different quantity of materials :

1st sample : With equal parts of Parada, Gandhak, Vanga, Navsadar & Kalmisora.

2nd sample : With one part of Parada, 2/3rd part of Gandhak & 1/2 part of Navsadar.

3rd sample : With 1 part of Vanga, 2 parts of Saindhav lavana, 1 part of Gandhak, Navsadar 1 part, Kalmishora 1/10th part.

During the Kupipaka 18 hrs. heat was given. Mridu agni for 6 hrs. & Madhyamagni for 12 hrs.

Swarna vanga prepared with 1st sample was found with fine particles & with golden colour.

Swarna vanga prepared with 2nd method was found with large particles & with golden colour.

In clinical study 30 patients were selected & grouped into 10 pts. of 3 groups.

Swarna vanga in a dose of 250 mg b.d. with milk was administered for 45 days.

Results of clinical study were as follows :

S.No.	Particulars	Sperm Qty. % gained	Sperm Speed % gained	Sperm Amount % gained
1.	Swarna vanga sample I	20	16.74	18.35
2.	Swarna vanga sample II	16.27	14.02	15.09
3.	Swarna vanga sample III	11.9	11.67	13.73

In Swarna vanga sample I - Patient got relief in the symptoms 52.94%.

In Swarna vanga sample II - Patient got relief in the symptoms 47.97%.

In Swarna vanga sample III- Patient got relief in the symptoms 38.59%.

Hence Swarna vanga sample I which is prepared with equal parts of Parada, Gandhak, Navasadara, Vanga & Kalmishora was having better result compared to 2nd & 3rd samples.

Rasa Shastra - 12

"Lohasevane Varjaneeyani" Their effect on Metabolism of Lohabhasma

Scholar	:	Dr. Vishi Bansal
Guide	:	Prof. Laxmikant Dwivedi
Co-Guide	:	Dr. Pradeep Kumar Prajapati
Year	:	2000

The objectives of this study were :

1. Pharmaceutical study of Lohabhasma.
2. Analytical study of Lohabhasma-AAS SEM.
3. Experimental study on albino rats & human volunteers.

The Munda loha (cast Iron) was taken for bhasma preparation & compared with two samples taken from market. For the preparation of Lohabhasma AFI was followed.

The Ferrous Iron percentage & Ferric Iron percentage was compared in analytical study revealed that increased number of putas leads of greater formation of oxides & thus elevating the ionic concentration of Iron.

In experimental study on animals the four groups were studied with one control group of 5 albino rats. The other groups given 0.008 mg of Loha bhasma with apathyas like tila taila & masha along with Lohabhasma for 15 days. Result showed increase in absorption of Iron in Ferrous & Ferric forms leading to its strong in hepatic parenchyma.

For study in human, 25 volunteers were selected, they were administered Lohabhasma in a single dose of 250mg/day for 15 days with ghrita and madhu and were divided into five groups of five each.

Group A	-	Control group, Lohabhasma - 250mg/day. They were instructed to strictly avoid the intake of apathya.
Group B	-	Lohabhasma - 250mg/day & were instructed to take 100-150 gms kusmanda in the form of sugar candy.
Group C	-	Lohabhasma - 250mg/day with 5-10 gm rajika/day
Group D	-	Lohabhasma - 250mg/day with amla rasa in the form of lemon juice and dried mango powder.
Group E	-	Lohabhasma - 250mg/day with alcohol 60ml/day

Results showed decrease in Iron binding capacity leads to inadequate delivery of Iron to erythroid marrow.

This states that on taking apathya either the Loha is exereted out before proper action or gets deposited in the body in a useless form or not taking part in erythropoesis.

Hence pathyapathya should be followed for getting beneficial qualities of Lohabhasma.

Rasa Shastra - 13

Physico-chemical and Clinical study of certain Medhya Kalpas with special reference to Saraswata Churna & Smruti Sagar Rasa

Scholar : Dr. Rajeshwar B. Chopade

Guide : Prof. Laxmikant Dwivedi

Co-Guide : Dr. Pradeep Kumar Prajapati

Sh. Yashwant Kothari

Year : 2001

The objectives of this study were -

1. Pharmaceutical standardization of classical formulations.
2. Physico-chemical standardization of classical, patent formulations.
3. To evaluate the efficacy of classical formulations in comparison to patent formulations in terms of memory intelligence.

Prepared Saraswata churna (AFI part II - 7/19) & Smruti Sagar rasa (AFI part II - 16/64) in three batches, compared with two patent ayurvedic formulations viz. Brento tab. and Memorin capsule on the basis of popularity. Studied these drugs clinically in 50 healthy voluenteers divided in 5 groups of 10 each. Prepared drugs were subjected to physico-chemical analysis & elemental assay.

Dosage of trial :

1. Saraswata churna - 1gm (Morning) with ghrita & madhu
2. Smruti Sagar rasa - 75mg (b.i.d.) with ghrita
3. Brento tablet - 1 tab t.i.d. with water
4. Memorin capsule-1 capsule b.i.d. with water
5. Control group - 1 capsule (Starch 500mg) b.i.d. with water

Duration of trial - 1 month for all the groups.

All the groups shown good significancy in I.Q. No significant improvement in remote memory & recent memory. Highly significant results on mental balance in all groups (Saraswata churna most effective). Smruti Sagar rasa shows significant improvement in attention, concentration & recognitions test. Brento tablet shows improvement in verbal retentions for dissimilar pairs.

Rasa Shastra - 14

Standardization of Arkavati and its effect on Agnimandya

Scholar : Dr. Moharpal Meena

Guide : Prof. Laxmikant Dwivedi

Co-Guide : Dr. K. Shankar Rao

Year : 2001

The objectives of this study were -

1. To compare the pharmaceutical processing and clinical efficacy of Arkavati (Siddha Bhaeshaja Manimala, Agnimandya Chikitsa/254) prepared manually & obtained from market.
2. To evaluate the agnivruddhi property of Arkavati.
3. Analytical study of prepared Arkavati.

Total 3 samples, in which 2 samples were made in pharmacy (NIA) & third sample was obtained from market. For clinical study selected 40 patients of Agnimandya were divided in 2 groups :

Group A - given Arka Vati (Lavanga yukta)

Group B - given Arka Vati (Arkapushpa yukta)

Dose - 2 tab. (250mg each) b.d. for 40 days with water.

Physico-chemical studies revealed that Arka Vati I&II were tablets weighed 250 mg. Arka Vati III - pills of 542 mg (market sample).

Acid insoluble ash found more in 2nd sample (0.55%) where as Water soluble (2.23%) ash & Water soluble extracts (69.15) was more in sample II. Disintegration time of sample I was 8 min., sample II was 9 min. & sample III was 16 min.

Both groups of patient showed significant results i.e. p value > 0.001, both found to be good in symptoms like anorexia & indigestion.

Rasa Shastra - 15

Pharmaceutical and Clinical study of some Ayurvedic medicines w.s.r. to Obesity

Scholar : Dr. Shivakumar Bhardwaj

Guide : Prof. L.K. Dwivedi

Co-Guide : Dr. P. Suresh

Year : 2001

The objectives of this study were -

1. Comparative pharmaceutical study of Vidangadi Yoga & Formulated compound.
2. Comparative efficacy of Vidangadi Yoga & Formulated compound to be tested on patients of Obesity.

In this study a comparative clinical evaluation of classical Vidangadi Yoga & a Formulated compound (F-compound) on Obesity has been done.

The ingredients of Vidangadi Yoga were - Amalaki, Shunti, Vidanga, Yava, Lohabhasma, Yavakshara & Madhu in equal parts. The ingredients of Formulated compound (F-compound) were - Guggulu (10 parts), Maricha (1 part), Pippali (1 part), Rasona (5 parts), Shunti (1 part), Lohabhasma (1 part), Tamra bhasma (1 part) & Shuddha Shilajatu (5 parts).

All the ingredients of Vidangadi Yoga were finely powdered (except honey) & packed in airtight containers. Ingredients of F-compound procured, Shilajatu & Guggulu were dissoved in water, powders of

remaining drugs were added, mixture was granulated. 500 mg of the drug is filled in 'O' No. capsules.

For clinical study 40 patients were grouped into 2 groups, given Vidangadi Yoga & F-compound for 2 months in a dose of 1.5gm t.i.d. & 2 capsules t.i.d. respectively with water.

In both the groups the results were found statistically highly significant while assessing their Weight, BMI, Waist measurement, Hip measurement, Lab. investigations like Triglycerides, Cholesterol & FBS.

Therefore, F-compound was found to be having better effect than the Vidangadi Yoga.

Rasa Shastra - 16

Pharmaceutical standardization of Taila Paka w.s.r. to Khseerabala Taila and its efficacy in Vata Roga

Scholar	:	Dr. Ashok Kumar Sharma
Guide	:	Dr. Santosh Kumar Mishra
Co-Guide	:	Dr. K. Ramchandra Reddi
Year	:	2001

The objectives of this study were -

1. Pharmaceutical standardization of Khseerabala taila.
2. To evaluate Khseerabala taila's effect in Vata Roga.

In pharmaceutical study Ksheerabala taila (Sahshra Yoga, P.N. 75) had been prepared in three lots. The physical and chemical characterastics of the different stages of oil were examined.

In the present study on the etiological factors of Gridhrasi has been conducted and analysed in 30 patients. The patients were categerised into 3 groups as -

Group A : This group consisting of 10 patients. They were managed with Lot. No. 1 Khseerbala taila.

Group B : Consisting of 10 patients. They were managed with Lot. No. 2 Khseerbala taila.

Group C : Consisting of 10 patients. They were managed with Lot. No. 3 Khseerbala taila.

Duration of trial - 2 months.

Khseerbala taila is used as external application.

Result of treatment was assessed on the basis of improvement in sthambha, ruk, toda, spandana, vedana, daha, sphurana, stabdhata & disturbance in gati.

In group A containing toda as symptom relief was 81.48%, in group B 62.5% & in group C 71.42%. On other symptoms satisfactory results seen. Out of 30 patients, 8 patients showed best results, 17 patients showed moderate results & 5 showed mild or no result.

Rasa Shastra - 17

Pharmaceutical & Clinical study of Haritaki Leha w.s.r. to Shwasa Roga (Asthma)

Scholar : Dr. Anup Kumar Naik

Guide : Dr. Santosh Kumar Mishra

Co-Guide : Dr. V. Nageshwar Rao

Year : 2001

The objectives of this study were -

1. Pharmaceutical study of Haritaki leha.
2. Clinical evaluation of antiasthmatic property of Haritaki leha.

Haritaki leha (Charak Chikitsa 18/168-169) was prepared in the pharmacy in 2 batches. One preparation with the addition of ghrita & another preparation without ghrita.

For clinical study 50 asthmatic patients were taken & divided into 2 groups :

Group A : given Haritaki leha without ghrita.

Group B : given Haritaki leha with ghrita.

In a dose of 1gm twice daily for 40 days with luke warm water.

Group B showed better result than the group A in clinical result & also in shelf life of Haritaki leha. The patients of both group showed increase in Hb%, normal value of ESR & Eosinophil.

Both drugs were safe, nontoxic in prescribed dosage but excess dose resulted in abdominal discomfort, nausea etc.

Rasa Shastra - 18

Concept of Shelf Life (Saveeryata Avadhi) w.s.r. to Churna Kalpana

Scholar : Dr. Anand Sheshadri Kahalekar

Guide : Dr. Santosh Kumar Mishra

Co-Guide : Dr. P.K. Prajapati

Year : 2002

The objectives of this study were -

1. To study the shelflife of single & compound herbal churnas.
2. Roles of packing material in storing the herbal drugs.
3. Preservative action of Sugar, Salts etc.

Three single herbal drugs & three compound herbal drugs were selected i.e. single drugs - Katuki, Yastimadhu & Amlaki. Compound drugs - Sitopaladi churna, Triphala churna, Vaishwanara churna were selected & their shelf life was studied.

Two samples of Amalaki (1) Pharmacy sample - dry (2) Self collected sample - fresh, were studied to check out the changes in stability while keeping them in crude form for more than a year.

Two types of packing materials were selected polythene pack powder & foil pack powder, packed in a polythene and studied upto 4 months.

The microbial count was found to be increased in all except Sitopaladi, Katuki & Amalaki churna. The extractive values were observed to be decreasing showing that the drugs were deteriorating at a particular

rate. The loss on drying in all cases was found increasing except in Sitopaladi churna.

Polythene pack showed much more decrease in the concentration of the drug constituents than the foil pack.

The saveeryata avadhi of churna preparation though explained as 2 months but that should be understood as they were effective, potent upto 2 months, afterwards they gradually start to lose their potency. Then compound drugs containing Sharkara & Lavana like natural preservatives can be used comparatively to longer period provided. They were kept in normal conditions with simple packing.

Rasa Shastra - 19

Standardization of Sulahara Taila with special reference to its Analgesic effect

Scholar	:	Dr. Galib
Guide	:	Prof. Laxmikant Dwivedi
Co-Guide	:	Sh. Yashwant Kothari
	:	Dr. Shankar Rao
Year	:	2002

The objectives of this study were -

1. To prepare simple Shulahara taila & special Shulahara taila.
2. Physico-chemical standardization of prepared tailas.
3. Experimental evaluation of analgesic effect of 2 samples of Shulahara tails.
4. Observational clinical study (Analgesic effect).

Three samples of simple Shulahara taila (Kalpit) with the kalka & kwatha dravyas like - Arka, Dhatur, Snuhi & Eranda and 3 samples of special Shulahara taila prepared with above ingredients in addition to Nirgundi was prepared according to Snehapaka Vidhi. Medicated tailas were green in colour with pleasant smell (Kharapaka).

Physico-chemical analysis of the prepared samples revealed increase in Acid value, Saponification value, Peroxide value and Unsaponifiable matter when compared with plain Sessame oil.

In experimental study plain Sessame oil & Ibuprofen were administered for the control & standard groups of 6 rats each. With the help of Analgesiometer 5 amp. current was passed to stimulate a pain and basal reaction (Tail flick) time was observed. Best analgesic effect was found in III group i.e. control group & IV group i.e. standard group compared to group I & group II of trial drugs.

For clinical study 30 patients of various musculo skeletal complaints of pain i.e. joints, backache, sciatica etc. were divided in 2 groups, treated with external application of simple Shulahara & special Shulahara taila for 15 days. Pain grading was done before & after treatment. In group I mild relief was seen in 6 patients (40%), moderate relief in 8 patients (53.3%) & complete relief in 1 patient (6%).

In group II mild relief observed in 5 patients (33%), moderate relief in 9 patients (60%) & complete relief in 1 patient (6%).

Hence the oils were proven to be having a good analgesic effect.

रस शास्त्र - 20

लवङ्ग.ादि वटी का मानकीकरण एवं कास रोग के परिप्रेक्ष्य में प्रभावात्मक अध्ययन

अध्येता : डा. सूरज पाल लाखा

निर्देशक : प्रो. लक्ष्मीकान्त द्विवेदी

सह–निर्देशक : डा. के. रामाचन्द्रा रेड्डी

वर्ष : 2002

लवङ्ग.ादि वटी का मानकीकरण एवं कास रोग में उसका प्रभावात्मक अध्ययन करना महानिबन्ध का उद्देश्य है।

इस शोध कार्य में लवङ्ग.ादि वटी (वैद्यजीवन, तृतीयविलास, श्वासकास–चिकित्सा) का निर्माण तीन प्रकार से किया गया –

योग क्रमांक–1 में कत्था, योग क्रमांक–2 में खदिर सार काष्ठ चूर्ण तथा योग क्रमांक–3 में खदिर सार काष्ठ से रसक्रिया (घनक्रिया) द्वारा निर्मित घन सत्व का प्रयोग किया गया। इन योगों का disintegration time क्रमशः 5–6 मिनट, 7–8 मिनट तथा 54–55 मिनट पाया गया ।

चिकित्सात्मक अध्ययन के लिए चयनित 30 आतुरों को तीन वर्गों में विभाजित कर वर्ग 'अ' में योग क्रमांक–1, वर्ग 'ब' में योग क्रमांक–2 तथा वर्ग 'स' में योग क्रमांक–3 का प्रयोग कराया गया। रोग एवं रोगी के बलानुसार लवङ्ग.ादि वटी का प्रतिदिन 4 ग्राम मात्रा में चूषणार्थ 20 दिन तक प्रयोग कराया गया ।

लक्षणों की उपलब्धता एवं तीव्रता में लाभालाभ के आधार पर वर्ग अ, ब एवं स के आतुरों में औसत लाभ क्रमशः 61.59%, 44.45% तथा 43.03% हुआ ।

रस शास्त्र - 21

सवीर्यतावधि के विशेष संदर्भ में औषध तैलों का मानकीकरण

अध्येता : डा. विपिन कुमार शर्मा

निर्देशक : डा. संतोष कुमार मिश्रा

सह–निर्देशक : डा. वी. नागेश्वर राव

वर्ष : 2002

औषधीय तैलों की सवीर्यतावधि का निर्धारण करना महानिबन्ध का उद्देश्य है।

जात्यादि तैल (J) (भैषज्यरत्नावली, 47/64–68) और विष्यन्दन तैल (V) (भैषज्यरत्नावली, 51/36–38) का निर्माण कर 5 माह के लिए सवीर्यतावधि देखी गई। दोनों तैलों के निर्माण के एक महिने बाद (J_1 व V_1) से लेकर दो माह बाद (J_2 व V_2), 3 माह बाद (J_3 व V_3), 4 माह बाद (J_4 व V_4), 5 माह बाद (J_5 व V_5) का भौतिक रासायनिक अध्ययन किया गया ।

जात्यादि तैल की सवीर्यतावधि का व्रण पर चिकित्सकीय अध्ययन किया गया। निर्माण के तुरंत बाद के सेम्पल से वर्ग I में 7 रोगियों पर और निर्माण के चार माह बाद के सेम्पल से वर्ग II में 7 रोगियों पर 20 दिनों तक बाह्य प्रयोग किया गया।

चिकित्सकीय अध्ययन से वर्ग I में लाभ 85.71 प्रतिशत तथा वर्ग II में लाभ 71.43 प्रतिशत प्राप्त हुआ ।

इस प्रकार उपरोक्त अध्ययन से कहा जा सकता है कि 4 माह में तैल के गुणों में कमी तो आती है लेकिन वह पूर्णतया खराब हो गया ऐसा कहना ठीक प्रतीत नहीं होता ।

Rasa Shastra - 22

Evaluation of Rasayana effect of Shilajatu

Scholar	:	Dr. Vadeyar Shrinivas
Guide	:	Prof. Laxmikant Dwivedi
Co-Guide	:	Dr. P. Suresh
Year	:	2002

The objectives of this study were -

1. To survey the Shilajatu sources, purify & analyse Shilajatu.
2. To study modern perspective of Rasayana with special reference to free radical theory of Aging.
3. To evaluate Rasayana effect of Shuddha Shilajatu by the parameter S.O.D. (Superoxide dismutase) in healthy volunteers with a double blind placebo controlled study design & to study safety of Shuddha Shilajatu by assessing kidney & liver functions.

For the survey purpose 4 samples of Shilajatu from Bageshwar, Jaurasi, Joshimath & Gopishwar was collected.

In pharmaceutical study collected samples were purified as per the ref. Rasamritam (P.No. 131-132) and Rasatantrasara & siddhaprayoga samgraha, part I (P.No. 63-64) by Agnitapi method which includes 4 steps- soaking in water or preparation of solution of Shilajatu, filtration, heating & drying. 500 mg of Shuddha Shilajatu was filled in capsules.

Shodhita samples were also subjected to chemical analysis like - Total ash, Acid insoluble ash, Ph, Moisture content, test for Benzopyrorus & Fulvic acid and Chromatographic finger prints.

In clinical study 30 healthy individuals of aged 16-30 yrs. were selected & administered with 2 gm (4 capsules) o.d. of Shuddha Shilajatu for 45 days with water for 2 groups with a control placebo group.

The results were found stastically significant increase in SOD levels in group A & B, decrease in S.Cholesterol, Tryglycerides, LDL, VLDL, Uric acid & increase in HDL seen in A & B groups in comparison to placebo group. No toxic changes found in liver & kidney functions.

Rasa Shastra - 23

Pharmaceutical and Clinical study of Brahmi Ghrita w.s.r. to its Medhya Karma

Scholar : Dr. Manish Tare

Guide : Prof. Laxmikant Dwivedi

Co-Guide : Dr. P. Suresh

: Sh. Y.K. Kothari

Year : 2003

The objectives of this study were -

1. Pharmaceutical study of Brahmi ghrita.
2. To evaluate its effect as Medhya.

In this study three samples of Bramhi ghrita (Cha.Chi. 10/125) are needed in the ratio below :

Sample I : Ghrita, Kalka, Bramhi swaras - 1:1/8:4 three samples I_A, I_B, I_C are made from same ratio.

Sample II : Kalka, Ghrita, Bramhi swaras, Water - in ratio of 1/8:1:4:4.

Sample III : Kalka, Ghrita, Bramhi kwatha are used in ratio of 1/8:1:4.

During the procedure temperature was kept between 90^o to 99^oC & Madhyama Paka of all samples was done.

Physico-chemical as well as chemical analysis of samples I_A, I_B, I_C , II, III alongwith 2 market samples D & G was done.

In clinical study samples given to 40 healthy volunteers in dose of 12gm with 20ml luke warm milk for 1 month. It showed statistically significant (23% increase) result on immediate memory but on remote memory only sample I showed remarkable results.

In physico-chemical analysis it was observed that Peroxide & Hydroxyl value of market sample was greater than sample prepared in pharmacy, which signifies that probability of rancidity increase in medicated ghrita in comparison to market sample of the medicated ghrita & thus medicated preparation is more sensitive to relative humidity & high temp. in the atmosphere.

Rasa Shastra - 24

Nirgundi Ghrita preparation standardization and its effect in Tuberculosis

Scholar	:	Dr. Chandra Bhan Sharma
Guide	:	Dr. Santosh Kumar Mishra
Co-Guide	:	Dr. K. Ramchandra Reddy
	:	Sh. Y.K. Kothari
Year	:	2003

The objectives of this study were -

1. Pharmaceutical standardization of Nirgundi ghrita.
2. Evaluation of anti-tubercular effect of Nirgundi ghrita (Chakradatta, Rajyakshama Chikitsa/83).
3. Analytical study of different samples of Nirgundi ghrita.

Four types of Nirgundi ghrita were made with different parts & forms of Nirgundi -

I Sample - made with Nirgundi patra swarasa.

II Sample - made with Nirgundi patra swarasa + water.

III Sample - made with swarasa of root, fruit & leaves of Nirgundi.

IV Sample - made with decoction (kwatha) of dry root, fruit, & leaves of Nirgundi.

For clinical trial 40 patients with tuberculosis were selected & divided into 4 groups of 10 each ghrita was administered to the patient in dose of 5gm twice daily with luke warm milk for 1 month.

In analytical study Specific gravity was found to be maximum in sample IV (0.908) & was very less in sample II (0.86), sample III had high Acid value i.e. 1.593. The Saponification & Ester value was found to be more for sample IV & least for sample II. Iodine value was more in II sample. Peroxide value was more in sample IV. Loss on drying was high observed in sample IV.

In clinical study patient relief in percentage as follows -

A Group	52.08	sample III	was given
B Group	44.94	sample I	was given
C Group	45.87	sample II	was given
D Group	42.24	sample IV	was given

Nirgundi ghrita sample III which was prepared with swarasa of root, fruit & leaves of Nirgundi was found to be more effective compared to other.

Rasa Shastra - 25

Study of some Gomutra containing formulations w.s.r. to its Microbial contamination

Scholar : Dr. Vimal Tewari

Guide : Prof. Laxmikant Dwivedi

Co-Guide : Dr. V. Nageshwar Rao

Year : 2003

The Objective of this study were pharmaceutical and microbial study of Punarnava Mandura, Gomutra Haritaki & Sanjeevani Vati.

Under the pharmaceutical study Punarnava Mandura, Sanjeevani Vati & Gomutra Haritaki were prepared as per AFI reference (AFI, Part I (19/1-Cha.Chi. 16/93-96), (12/35 - Sha. M. Kh. 7/18-21) and V.N.R. part 5/Pandu roga P.No. 81.

In microbial study the determination of micro-organisms was done for-

1. Total viable aerobic count.
2. E.coli
3. Salmonella species
4. Staphylococcus aureus &
5. Fungus.

The methods employed were plate count method and multiple tube method having reference of IP (Indian Pharmacopoeia) 1996.

Microbial contamination of Punarnava Mandura, Sanjeevani Vati & Gomutra Haritaki :

S. No.	Microbes	Method	Punarnava Mandura	Sanjeevani Vati	Gomutra Haritaki
1	E. coli	IP, 96	Absent	Absent	Absent
2	Salmonella	IP, 96	Absent	Absent	Absent
3	Staphylococcus	IP, 96	Present	Present	Present
4	Fungi	IP, 96	124/gm	72/gm	355/gm
5	Total viable aerobic bacterial count	IP, 96	36549/gm	30957/gm	644242/gm

Therefore, High degree of microbial contamination is found in Gomutra Haritaki due to its long treatment with cow urine.

Less degree of microbail containation is found in Sanjeevani Vati of both self and pharmacy samples probably because of presence of antimicrobial agent in the formulation in comparison to Punarnava Mandur and Gomutra Haritaki.

Rasa Shastra - 26

Study on Pushpakalka Yukta Snehapaka Kalpana w.s.r. to Vasa Ghrita

Scholar : Dr. Sushanta Kumar Mohapatra

Guide : Prof. Laxmikant Dwivedi

Co-Guide : Dr. P.K. Prajapati

Year : 2003

The objectives of this study were -

1. To standardise of Snehapaka Vidhi vis; Vasa ghrita (Cha.Chi. 4/88).
2. Physico-chemical analysis of prepared sneha.

12 samples of Vasa ghrita (Vasa + ghrita) was prepared in the pharmacy. Three samples each of Vasa ghrita with sushka pushpakalka in different proportions i.e. 1/2, 1/4, 1/6 & 1/8 to that of ghrita had been prepared, thrice each. One sample with ardra pushpakalka & one sample with distilled water in place of Vasa kalka was prepared.

In analytical study the colour of ardra pushpakalka ghrita was different from suska pushpa kalka ghrita.

For pharmacological properties 1/4 & 1/8 proportion of pushpakalka to that of sneha should be used for augmentation of smell (Gandha vriddhi).

All samples showed Sp. gravity at 40°C - as 0.89 - 0.90, Saponificaion value 208.43- 274.0, Iodine value 17.06-33.15, Easter value 207.03-273.65.

So, these value should be taken as standard for Vasa ghrita prepared by pushpakalka.

Rasa Shastra - 27

Study of Abhraka Bhasma w.s.r. to its effect on Hyperglycemia

Scholar : Dr. Amita Jhunjhunwala

Guide : Prof. Laxmikant Dwivedi

Year : 2004

The objectives of this study were -

1. Pharmaceutical study of Abhrakabhasma.
2. To analyse the chemical compostion of prepared Abhraka bhasma.
3. Clinical evaluation of hypoglycemic activity of Abhraka bhasma.

20 puti Abhrakabhasma (Rastarangini 10/39-42) was prepared using Madhumehari churna (Kalpit, contents : Gud mar patra, Jambu beej, Carilla beej, Bilva patra, Nimb beej, Babool phali, Sunthi, Methi beej, Amrasthi majja, Sounf beej, Bala beej & Sanai patra - in equal parts) kwatha. Shodhana was done with Triphala kwatha & Danyabhraka was prepared & subjected marana process. Abhrakabhasma triturated with Arka ksheera & Vatajata kwatha & 10 gajaputa was given which is further divided into 2 parts & processed further for 20 puta.

Chemically the raw material Dhanyabhrak and Abhrakbhasma upto 10 puti were devoid of Ca. However finally prepared Abhrakbhasma (20 puti) samples contain Ca. Increase in Na & K in the final samples were found. The sample 20 puti AB_2 showed less Iron content.

For clinical study patients were categorised into 3 groups as -

1. control group (C) 2. Two trial groups (A&B). Treated group patients were given AB_1 & AB_2 in capsule form in the dose of 125mg b.d. with water for 1 month. Control group (C) received Barley flour as placebo.

Group B which received AB_2 showed comparatively better results in both symptomatic & lab. parameters. Patients of group C had encountered increase in some complaints.

Rasa Shastra - 28

Pharmaceutical and Antimicrobial studies of Tribhuvankeerthi Rasa

Scholar : Dr. Praveen R. Raut

Guide : Prof. Laxmikant Dwivedi

Year : 2004

The objectives of this study were -

1. Pharmaceutical standardization of Tribhuvana keerthi rasa (Rasamritam, 9/80-81).
2. To evaluate the antimicrobial effect of Tribhuvankeerthi rasa.

Tribhuvankeerthi rasa was prepared as 5 samples.

Sample T_1 - As per AFI (Part I 20/20) specification.

Sample T_2 - Without bhavana of Nirgundi swarasa (Yogaratnakar, Jwara Chikitsa).

Sample T_3 - Without Hingula having all 12 bhavanas.

Sample T_4 - Without Vatsanabha having all 12 bhavanas.

Sample T_5 - Without any bhavana.

The pharmaceutical studies showed the % of extracts obtained from Nimbu, Tulsi, Ardraka, Dhattura & Nirgundi swarasa were 11.69%, 8.5%, 9.01%, 9.05% & 8% respectively. 85.14% of increase in weight after bhavana was found may be due to the addition of extract of 12 bhavanas of herbal drugs.

For antimicrobial activity aquous & methanolic extracts & also direct powder of these samples were prepared & tested on different species of common pathogenic bacterias. In aquous extracts no inhibition zone was observed with in 24 hrs. in any plate. In methanol extracts inhibition zone was observed only in Staph. aureus plate & found moderately sensitive 100mg/ml concentration of T_1 & T_3 less sensitive to T_2,T_4 & T_5. In T_4 readings were slightly lower than sample T_1 & T_3 inhibition zone observed in Staph. aureus & Salmonella typhi plates. S.typhi found sensition to 25 mg fine powder of all 5 samples. T_1 in its methanolic extract & powder form was found more effective that T_2 proving the antimicrobial activity of Nirgundi patra swarasa.

In brief the properly prepared Tribhuvankeerthi rasa with or without bhavana can acts as best antimicrobial.

Rasa Shastra - 29

Pharmaceutical and Antimicrobial studies of Sanjeevani Vati

Scholar	:	Dr. Hema Chandra Sharma
Guide	:	Prof. Laxmikant Dwivedi
Co-Guide	:	Dr. K. Ramchandra Reddy
Year	:	2004

The objectives of this study were -

1. To prepare & standardize Sanjeevani Vati.
2. To study the antimicrobial activity of Sanjeevani Vati.

Sanjeevani Vati (Sharangdhara, M.Kh. 7/18-21) as per AFI specificaion, shows the increase in weight as compared with the initial

weight may be due to the addition of extract from 7 bhavanas found to be 33.20%.

The aquaous extract of Sanjeevani Vati samples showed no effect against any of the given bacterial species viz. S.typhi, E.coli, Staph. aurecus, Strep. pyogens & Pseud. aeruginosa. Where as the methanol extracts of Sanjeevani Vati samples were effective against S. typhi, Staph. aureus & Pseud. aeruginosa.

Rasa Shastra - 30

Study of Free Radical Scavenging activity of Chyavanprash w.s.r. to Amalki + Pippali

Scholar : Dr. Sujit Kumar Dalai

Guide : Prof. Laxmikant Dwivedi

Year : 2004

The objectives of this study were -

1. To review the literature on Chyavanprash & Rasayana.
2. To study the modern perspective of Rasayana with reference to free radical theory of Ageing.
3. To develop a (SOPs) of Chyavanphrash in the light of GMP guideline.
4. To evalute the pharmaceutical & physico-chemical parameters in standardization of Chyavanphrash w.s.r. to Amalaki and Sugar.
5. To evalute the free radical scavenging activity of Chyavanprash by the assessment of Superoxide dismutase, Ascorbic acid, Glutathine, Tocopherol and Malondialdehyde level in elderly volunteers with a doule blind comparative study design.

6. To document the changes in subjective (Overall health status) and objective parameters.
7. To determine the Rasayana effect of Amalaki & Pippali in Chyavanprash.

Three samples of Chyavanprash are selected for the study.

C_1 contains 500 no. of Amalaki, quantity of Amalaki adopted 6 kg, quantity of Sugar adopted 7.2 kg (Sardhatula).

C_2- 500 no. of Amalaki, quantity of Amalaki 2.5 kg, qty. of Sugar adopted, 2.4 kg (Chardhatula).

C_3 - 500 no. of Amalaki with out Pipalli, quantity of Amalaki 2.5 kg, quantity of Sugar adopted 2.4kg (Cardhatula).

In manufacturing operations the quantity of ingredients are taken for C_1 - according to the formula cited above where sample C_2 & C_3 are three times to that of above selected respective formula.

For clinical study 30 healthy non-patient elderly volunteers in a randomized double blind comperative design in 3 groups (A, B & C) each containing 10 volunteers, trialed with 3 Chayvanprash samples of C_1, C_2 & C_3.

Mode of administration - Vatatapika.

Dose - 24gm o.d.

Duration of trial - 40 days.

Maximum overall effect of sample C_2 on group B was 13.49%.

Average effect of sample C_3 on group C was 10.69%.

Least effect of sample C_1 on group A was 4.71%.

So sample C_2 is best in every aspect as in pharmaceutical & physico-chemical aspect than sample C_1 & sample C_3.

Rasa Shastra - 31

Study on Punarnava Mandur w.s.r. to its constituent Mandur Bhasma

Scholar : Dr. Urmila Waxar

Guide : Prof. Laxmikant Dwivedi

Year : 2004

The objectives of this study were pharmaceutical and clinical study of Punarnava Mandur.

Three samples of Punarnava Mandur (Cha.Chi. 16/93-96) were prepared with following three different Mandurbhasma samples.

Sample A containing 7 puta Mandurbhasma.

Sample B containing 21 puta Mandurbhasma.

Sample C containing 30 puta Mandurbhasma.

For clinical study 30 patients of Pandu roga were selected w.s.r. to Iron deficiency Anaemia. Divided into 3 groups & administrated with Punarnava Mandur capsule of 500 mg. b.d. with takra for one month period.

All groups showed highly significant clinical improvement. The overall percentage of improvement in laboratory investigation was found better (20%) in group B, followed by group A (17%) & then group C (15%).

Rasa Shastra - 32

Pharmaceutical, Pharmacological & Toxicological study of various Louha preparations w.s.r. to Iron Deficiency Anaemia

Scholar	:	Dr. Namrata Joshi
Guide	:	Prof. L.K. Dwivedi
Co-Guide	:	Prof. G.D. Khilnani
Year	:	2005

The objectives of this study were -

1. Pharmaceutical standardization of Louhabhasma (Rasatarangini 20/31-39), Lohasava (Sharangdhar M.Kh. 10/34-36) & Navayasa louha (Cha.Chi. 16/70-71).
2. Analytical & toxicological study of different dosage forms of Louha.
3. Clinical evaluation of haematinic effect of Louha compounds in Iron Deficiency Anaemia.

In this study Louhabhasma (60 puta), Navayasa louha & Lohasava were prepared in the department. Analytical study revealed the addition of prakshepa after completion of fermentation was more effective. Decrease in % of total Iron among various samples under different stages of recessing is suggestion of addition of trace elements that helps in counteracting the inherent properties of Metal.

Experimental study reveals a dose of even 4.6 mg of Louhabhasma did n't impart any toxic features.

For clinical study selected 30 patients were devided in three goups for trial.

Group I - Louhabhasma 125 mg b.d. with madhu & ghrita.

Group II - Navayasa louha 250 mg b.d. with madhu & ghrita.

Group III - Lohasava 25 ml b.d. with equal quantity of water.

Duration of trial - 6 weeks.

Clinical study showed haematinic potential of all the 3 Iron containing drugs at varying level. Such as 6.81% in Louhabhasma, 29.25% Navayas lauha and 13.50% Lohasava with better results in Navayasa louha & Lohasava in correcting the underlying pathology even better than the conventional modern therapy with control group (Ferrous Sulphate) 17.05%.

Rasa Shastra - 33

Fertility study of Pushpadhanwa Rasa in Albino Rats

Scholar : Dr. Manoj Kumar Dash

Guide : Prof. L.K. Dwivedi

Co-Guide : Dr. R.S. Gupta

Year : 2005

The objectives of this study were -

1. To standardise the pharmaceutical preparation of Pushpadhanawa rasa.
2. To evaluate fertility action of Pushpadhanawa rasa (PDR) on experiemental study & clinical study.

Three types of Pushpadhanawa rasa [AFI part II (Rasa Prakarna)] were prepared by using bhawana, by using aqueous extract of bhawana dravyas & the third type without having any bhawana.

Experimental study was carried out using above three samples & its effect on sexual behaviour was observed in artificially infertile animals.

For clinical study selected 12 Pco's patients were administered preparation in two groups in a dose of 250 mg for 3 months with ghrita & madhu.

In experimental study results were found that all the three samples enhanced the mating behaviour in comparison to control group. The sperm motility & density was increased apart from the increase of testosterone level. PDR-C had the potential of producing moderate toxicity in liver, heart & kidney while the PDR-B had slight toxicity & more effective.

In clinical study PDR-B showed reduction in number & size of cystic enlargement. It also showed ovulatory hormonal regulatory effect.

रस शास्त्र - 34

बस्ति का मानक विनिर्माण, मानकीकरण एवं वातघ्न कर्म का अध्ययन एरण्ड मूलादि निरुह के परिप्रेक्ष्य में

अध्येता : डा. गोविन्द नारायण शर्मा

निर्देशक : प्रो. लक्ष्मीकान्त द्विवेदी

वर्ष : 2005

एरण्ड मूलादि निरुह बस्ति का मानक विनिर्माण, मानकीकरण एवं वातघ्न कर्म का अध्ययन इस महानिबन्ध का उद्देश्य है ।

एरण्ड मूलादि निरुह बस्ति (चरक, सिद्धि 3/38–42) का 4 प्रकार से निर्माण किया गया –

सेम्पल "B" – में Preservative नहीं डाला गया ।

सेम्पल "P" – में Preservative डाला गया ।

सेम्पल "C" – में क्वाथ को घन रूप में रखा गया ।

सेम्पल "SC" – में क्वाथ को सूक्ष्म रूप में रखा गया ।

इन सभी सेम्पलों की सवीर्यतावधि में सेम्पल "P" की अधिकतम 5 माह तक पाई गई बाकी सेम्पलों की 3 माह तक रही ।

20 आतुरों में 500 मि.लि. एरण्डमूलादि निरुह बस्ति 15 दिन दी गई ।

लक्षणात्मक आधार पर स्तम्भ लक्षण में लाभ 65%, कम्प लक्षण में लाभ 60%, तथा अनिद्रा लक्षण में लाभ 57% प्राप्त हुआ ।

इस प्रकार उपरोक्त अध्ययन में एरण्ड मूलादि निरुह बस्ति का वातघ्न कर्म दृष्टिगोचर होता है ।